

THE GROUNDS

...OF AN...

OLD SURGEON'S FAITH

By

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Hertzler

The grounds of an old surgeon's
faith

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"If we do not destroy this dangerous invention (the printing press) it will one day destroy us."

—Cardinal Wolsey, 1474.

"All truth is safe, and nothing else is safe; and he who keeps back the truth, or withholds it from men, from motives of expediency, is either a coward or a criminal, or both."

—Max Muller.

"If ever the human race is raised to its highest practical level intellectually, morally and physically, the science of medicine will perform that service."

—Descartes.

"You can't help the world much by voting your neighbor better. The way to help is to be better, more unselfish, kinder, and broader-gaged yourself."

—W. A. White.

The Grounds of an Old Surgeon's Faith

A Scientific Inquiry Into
the Causes of War



By
Arthur E. Hertzler, M.D.
Halstead, Kan.

*"We cannot know anything about a future life. All we can
do is our very best and then take what comes."*

MY LAMENTED AGNES.

Dedicated

*In the profoundest veneration and respect
to the
Aggrieved War Mothers of the world*

PREFACE

The purpose of this book is to inquire into the causes of war. The only way in which it will be possible to eliminate war is to discover the causative factors. Only after these have been determined can we hope to eliminate them.

I have written a scientific treatise. I have searched for facts. Each paragraph has been subjected to two questions: Who said what, and Is it true? That the reader may verify my facts I have appended a bibliography from whence each fact was obtained. I have arranged my citations in alphabetical order. The name of any authority presented in the text can easily be found in the list of authors. I have quoted only recognized authorities in their respective lines. The books listed are all at my elbow, the accumulation of forty years. The figures in my problem is the work of others. My responsibility rests entirely in the manipulation of the adding machine.

There are many repetitions. Part of these are deliberately presented because I felt they needed emphasis. Other repetitions have been entered with the idea of making each chapter as complete as possible.

I beg of readers, if they start, to read me through. I am not a nihilist. I have tried to cast the light of truth on the basic factors on which we have builded our civilization. The futility of our effort is now manifest in global disaster. I have tried to show that what has been accomplished has been builded on conscience and expressed manifest in the character of individuals. It is the relation of man to man, as expressed in the Golden Rule. The time has come when we must face the truth. My appeal is to those who do not fear the truth.

I am privileged to present a foreword by William Allen White. This is the noblest and most compre-

hensive philosophy of life yet presented to mankind. No more courageous document was ever penned. To do one's best and *then take what comes*. That is the message of a life courageously lived. In this book I have tried to prove it by a scientific examination of the facts available. If I could feel that I have contributed anything to this philosophy, I should regard it as the *end of a perfect day*.

Now at the end of this volume, to my faithful secretary of twenty-two volumes, Ruth Rose, who struggled through the endless notes, citations and a complicated bibliography which has made up this volume, I owe the deepest appreciation. I had hoped this book would be our swan song. However, in the attempt to make this book nice so as to give no pain and make nobody mad, I have been compelled to understate unpleasant facts. In doing so it is obvious that an added volume will be necessary to trace the struggle of the human race from phallus to Jesus more plainly in order to determine how it got lost in the wilderness of revelation.

FOREWORD

I do not believe this world just happened. There is too much circumstantial evidence indicating law. We have fairly well clarified the laws of the physical Universe. We are broadening our knowledge of the material code every hour. In the last four hundred years we have come further toward an understanding of the material universe than man had gone in the ten thousand years before. In many areas of our knowledge, science correlates physical causes and effects.

I believe that we are now coming into a time when spiritual laws, the relation between cause and effect in human conduct, will be clarified as the great laws of physics and chemistry have been set up. I believe the laws of the human spirit, the human mind, human conduct, stem out of the same law that governs the atoms and the stars. It is all one law.

Man as a conscious being is a part of this universe. Somewhere, somehow, something and perhaps someone—I do not know—made or was the law that made conscious man, and whenever, whatever, whoever it was was vastly more conscious than man. Yet man's consciousness, limited as it must be, is a part of that greater consciousness and on this old earth is of its own unique kind.

The mollusc cannot comprehend the fish nor the fish the quadruped nor the quadruped the primate nor man God. That is why, when anyone attempts to tell me what Heaven is, I feel like a fish who has been told about Sunday school. I don't understand it. In the nature of things, I can't understand. I would be scared to death if I thought Heaven was what the theologians say it is and I know they don't know any more than the fish knows about the Sermon on the Mount. Yet the law back of the Sermon on the Mount is part of the great law which cast the fish in his physi-

cal form and gave him his sense of the school of fishes and the law of fishes and the way of fishes.

There is no reason why man should not survive in some higher form. There is no reason why, when we know the spiritual laws as we know the physical laws of this world, men may not then see "not through a glass darkly but face to face" with the things that are. So, as I came into this world unafraid, I shall go out of it in hope—hope of I do not know what. I do not care. I found life good when I got here. I have tried to learn the law and obey it—and have failed, as all human beings fail. But I have had a good time going along. It has been better than it used to be in those days and times before I found my feet in the path of the law. I mean the law that gives the other forms of life their guidance, that sends the fishes swirling in schools, the birds in flocks, the animals in herds; that makes the jungle and sets all of the occupants thereof, each in his way and place, each following the law of his kith and kind. Man is now entering a stage of development where he is going to know more about the law of his nature as he has learned the laws of his universe. I should like to live to see it. But better men than I have lain down in a darkness even deeper than we know who have lived thus far. The great seers—Confucius, Buddha, Plato, Moses, Socrates, Jesus, the poets—Shakespeare, Goethe, the Greek tragedians—all have sensed this law. Each has contributed his mite to writing this law. And some time, some day, we will set down this law with as much scientific certainty as we now know the law of the stars, the law of the atoms and set down those laws. We shall know about the spiritual gravity which draws men through consideration of others into happiness. We are just beginning to know that this law of human happiness is working. Some day we should know how and why it works.

I hold that since man came down from the trees and began to walk erect upon this earth, through the long years of progressive change, two things and only two have been changeless: First, the impulse, the pattern in the seed of human life spiritually bred into our hearts—I mean the power beyond human control—man's racial fate—let us call it human destiny—which has moved man steadily through the ages from simpler to more complex forms of social, moral, political and economic life. That impulse is constant. The second changeless quality in life is something inside the human heart and mind, something that always has known the ancient verities—love of courage, love of beauty, the joy of money, the rewards of tenderness, respect for loyalty, the urge for justice. Following these verities through the labyrinths of environment change, through epochal geological periods and through the dim vistas of recorded time, man, guided by the impulse that created him, has been ever seeking something better. He has been discontented with his surroundings. That discontent is divine. Man has been trying to find something finer, yearning for some more equitable human relation—more beauty, keener joy, surer rewards, wider self-respect, a stronger urge for justice. Man from his mental infancy has been growing into a widening understanding of certain strange simple truths.

Let me elaborate this statement: It baffled the old fellow who wrote the proverbs to know the way of a serpent on a rock, the eagle in the air and the way of a man with a maid. But the ways of the serpent and the eagle are as they were when they became serpent and eagle. But let us thank all the gods at once, that the ways of the man with a maid are not what they were when the philosophers were puzzled by the conduct of the animals. Man and the maid have changed their lair to a house, their house to a home, their home to

a vast interdependent civilization. The rough law of capture by which man took his maid, has been transmuted into the golden law of love. Into love has come mutual respect. Out of our inner need for self-respect have grown the codes, the customs, the expanding laws of human relationship that hold our democratic civilization together. The serpent still coils on the rock; the eagle still hovers in the air as the first serpent and the first eagle were taught. But ah, the way of a man and a maid! That ancient man and the maid—they are still trudging along toward some much more realizable ideal of neighborly conduct to-day than they had yesterday. This ceaseless quest for what we call truth has been a shadow going ahead of the race through man's short life on this old, old earth.

Perhaps we might say better that these changeless shadows—these ideals, the aspirations—in the human heart have lured man on and on, always, in the long run, nearer to his quest, but alas, as his vision widens, still further from his goal. But through it all, since he made the first record of his consciousness as an aspiring soul, man has wanted, on the whole and in the main, to do right as his clouded eyes have seen the right. This righteous quest for justice has been the most powerful impulse in human life. It has been greater than the desire for self defense. It has stirred men deeper than hunger. It has even placed honor above love. That human quality, whatever it is, deeply planted in our natures, is the ultimate, changeless thing that guides the spiritual evolution of mankind.

Now, about man's immortality? No one really knows. Signs and portents have come but they are vague and inconclusive. There is nothing, however, to dispel hope, nothing to shatter faith in immortality. The cosmic consciousness which patterns the universe and, with law, holds physical atoms and systems of suns to their appointed patterns, is, of course, the same

law or source of law that gives man all his faculties, his consciousness, his memory, his reason, his heart that has been growing more and more merciful and tender for ten thousand years. These blessings, which, in some way, mark the line between man and his other friends in this world, are also attributes of the great first cause of all things. For short, we call it God. For the consciousness that makes man what he is must be larger, wider and deeper than man. It must have, in the whole, all the parts of man's nature.

The kindly man, the temperate, merciful, considerate man, who lives to honor and respect all life about him, from grass upward to the astronomer and the saint, some way manages to be fairly happy. Which does not mean that he dies rich and honored. It does mean that he has many deep unique satisfactions. His satisfactions increase with his obedience to the law that says kindness is the source of man's happiness. Well, why cannot man trust the wisdom of the Greater Law to guide his destiny after he leaves this fleshly tenement? That law brought him here. It raised him up above all other life about him. That law of man's being gave man a chance at happiness which he could take or leave alone. Then why not hold the faith that if our human attributes are part of an ancient patter of life, they may persist beyond the wilderness of this world? The fish has become a bird and the bird a mammal and the mammal a man. Why not assume that there are other kinds of sentient, loving, happy creatures in this cosmos in another plane and sphere of life, where something that is good and true and beautiful within us may keep on living in happiness? "Why not?" is all that man can ask. But so long as he can ask it, he can hope. So long as he can hope man has a right to his faith.

(Signed) W. A. White

October 9, 1942

Emporia, Kans.

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CHAPTER I

PROLOGUE

There are times when a surgeon faces a situation in which he must act even though a positive diagnosis of the nature of the disease is not possible. Yet he must act or the patient will surely die. Such a condition is presented by what we call the acute abdomen. The patient's weal depends on the surgeon's skill in placing his incision at the most advantageous site in order that he may meet any of the possible conditions present. The abdomen once opened the lesion is quickly located and its exact pathological condition determined. From then on it is a matter of technical skill, which is a composite of scientific training, which he has given himself, and native surgical judgment, which is the gift of Fate. In such a situation the surgeon has a peculiar feeling as he reaches for his scalpel. He feels that he has behind him the accumulation of the knowledge of medical science to date. It is a time of judgment when he is called upon to show how well he has used his opportunities. He feels at once a sense of weakness, which is inherent in all of us in times of crisis, and of power of his science speaking through him to that particular patient gives him; but above all is the consciousness of his professional duty: he must act.

I

In the discussion of the present world crisis I have much the same feeling. But as I pick up my pen to perform my self-imposed task I feel less secure than when I have the feel of a blade of steel. There are not the laws of science behind me. There are no definite lines to guide me because the affliction which has submerged us does not follow the orderly course of disease processes. Mythology, hate, the striving of mankind toward a higher civilization, through the development

of higher morals prompted by the development of character, are so mixed that we have a most confusing picture.

All we know is that our civilization is afflicted by some terrible disease, demanding an accurate diagnosis, at a time when certainty is impossible. Without the ability to formulate even a partial diagnosis treatment is dependent on the judicious weighing of possibilities.

A wise doctor is he who, faced by a confusion of symptoms, searches for the most promising lead to a remedy. We may catalogue the possible causes of the disease which now afflicts us as follows: 1) the hate of the church brought down to date still clothed in the mythology of the Dark Ages; 2) the greed of politicians; 3) the breakdown of the character of the public; 4) a combination of all three. These may be considered in turn.

Of only one thing are we sure: people are killing each other on a vast scale, reminiscent of the acts of the inspired ones in the Scriptures. We need to inquire first of all why they did so, have continued to do so in all the ages past, and why we must imitate them today. The answer is that we are but little removed from the preCanaanite savages in our fundamental thinking. The church hates on. We have blinded ourselves by adhering to a semicivilized cruel and jealous God.

1) The hate of the church. That the church organization is a chief repository of hate is obvious. It is a senseless hate, the malice of it leads back to the very beginning of the sense of worship. The church is based on the Bible. It is a confusion of contradictions, withal far below the moral standards of today.

2) Politics is a variable word. It ranges all the way from those who are venal and selfish, willing to degrade the common people purely to satisfy a sense of grandeur or of profit, down to the lowly county of-

ficer who only desires a modest meal at the pie counter, in consideration of which he seeks to render faithful service.

The theory of a democracy is that the people elect those who administer the laws the body politic desire. Yet the overweening desire of the politician is to keep himself in office. This is a necessary result of our system of government. Notwithstanding this obvious fact, many legislators labor valiantly for the public good, with too often conflicting variations. On the whole we are better governed than we deserve. It is now too obvious that in this present crisis our legislators slept. That they are waking now after it is too late only makes them the more culpable. So we say now, but in that sleep we all were their bedfellows.

3) The breakdown of the morals of the people now is obvious, always emphasized in the time of war when the baser elements are unleashed. The history of nations has been one of rise and fall, rise by individual effort, fall by dissipation of the organized masses guided by a few who gain by the collective effort. It is a history of rise in adversity and fall in prosperity. The element of pecuniary affluence invites dissipation. Dissipation of opportunities has shown itself as potent for decline as the triad of wine, women and song which delighted our forebears. We are comparatively decent in our dissipation, now, but affluence makes possible more leisure which we have not used intelligently. But striving for leisure engenders class hatred.

4) No one of these groups, acting alone, could have produced a global war. It required cooperation, opportunities neglected, opportunities used, a disregard of our duties to our fellowman. It is a mixture of good intentions with bad intentions. Only results count, as we see now.

II

We are in the worst mess in history. The question

is: Are we to continue in the path we have traveled and drift into a greater global disaster, assuming that such a state is possible. We may review the present situation in the hope that we will see the folly of our way and correct the lines of our conduct.

1) We may look first to the church. Why are the bloodiest acts in history associated with the word Christian? Christian church, Christian martyrs, Christian and blood, even down to the bloody sacrament of Christ last Sunday, all one and inseparable. All this is based on the acceptance of the Bible as the product of inspired minds, though based on the acts of a cruel God who incites to murder. He told the inspired ones not a thing but what the semisavages already knew.

The hopeful sign is that the members are nobler than the governing bodies. The hate of the clergy does not engulf them. They have tasted the fruits of advancing civilization.

A new note is sounded in the New Testament where the Jesus concept enters, with admonition of gentleness, solicitation for the children, but this part of the Bible is ignored by the churches and hate continues.

Church members are compelling the clergy to assume a nobler plane. The jealous God of Moses is now assumed to be good and loving, to meet the demands of the present day, though there is no evidence of it in the basic teaching of the church because it cannot follow the development of mankind while retaining the teaching of a bygone age.

The most hopeful sign of future progress of the church lies in the obfuscation among churchmen themselves. They have charted the course and have demanded obedience. For centuries their chief distress was caused by the development of science which proved their basis of revelation untenable. Now the pain is not caused by the scientist, but by their own shortcomings as measured by relations to their adherents.

I shall mention two examples: Dean Inge, preaching at St. Paul's Cathedral on Ascension Day, 1914, said: "I do not believe there ever was a time when Christians thought less about heaven than they do now. Those who are most in earnest about improving the condition of human society in this world look upon this heaven as a fairy story, and many of them think that the clergy are trying to keep them quiet by giving them promissory notes to be paid in another world which does not exist. They even look upon the doctrine of a future life as a profitable fraud, which after many centuries, has at last been exposed, and so they say, 'We prefer payment in cash; your bank up in the sky has stopped payment.' Eternal life is not something in the future; it is now. Working-men would rather hear us say, 'I do not know,' than have crude symbols given them as literal facts."

This eminent clergyman is referred to as the Melancholy Dean. The contemplation of such a picture is enough to make any honest, intelligent man view the future with apprehension. I know just how he felt. In the childhood of my surgical experience I removed an appendix from a young boy. He died of hemorrhage from a stomach ulcer. The Melancholy Doc then was brother to the Melancholy Dean; we followed the wrong diagnosis and naturally the treatment failed.

An even sadder note is sounded by an equally eminent clergyman, Archbishop Francis J. Spellman, in a recent book, *The Road to Victory*: "How sad it is to think that the world, and especially our own country, has made such progress, intellectually, mechanically, industrially, and at the same time has retrogressed morally and religiously." He like the Dean is melancholy.

The vehement cry of the clergymen above noted leaves us confused. The Dean rests with the statement of his diagnosis of a situation; the Archbishop is vehement in the assertion that we must recover by larger

doses of the same remedy. There is no thought that the remedy may not be potent to meet the present situation and he calls to the God of Moses to save us.

This much is obvious: there is distress among the clergy, not for civilization but for their own future. This is evidenced by the fact that, in addition to the cry of the clergymen above mentioned, there is a flood of books written by ecclesiastics seeking to repair what was once cherished as a superperfect machine. To mention a few: "Can a Man be a Christian Today;" "Can Christianity Save the Nation;" "Five Minutes to Twelve;" "I, Yahweh;" "Pathways to Certainty;" "Harmony of Science and Scripture;" "The Bible is Human;" and a host of others. These books express the feeling of apprehension rather than of melancholy. All is confusion.

All this confusion the church brought on itself. There is a demand for one church which can harmonize itself with the needs of the world today. It must unite on one God who speaks the same language to all churchmen which they can transmit to their people. Can or will the church accomplish this necessary end on their own motive power? The history of the church lends but little encouragement. The people have advanced but churchmen anchored by revelation cannot follow. This is unfortunate because most suffering is not due to organic disease, the particular province of us doctors. Most suffering is of the spirit brought on by misconduct of those who govern us. This suffering requires specialists in human understanding and sympathy, a field unrecognized by revelation. We need some institution built to do the work the doctors can't do. To lend the distressed comfort. Son dead, prayer, luminal—what a mess we make of it.

We need an antitoxin against hate. Only a common brotherhood can eliminate hate. I know so many fine ministers who if they could forget their theology and

unite in the service of mankind could take their place alongside of us doctors. Then they could build a religion in their church just as we doctors do at the bedside. Together we could work out a preventive anti-toxin against hate, sex and greed.

The truth is the world has advanced much, in spots, built on the basis of the achievements of individuals, the expression of conscience and building of character the product of which is morals, the conduct of the individual in relation to his fellows. Have the churchmen helped or hindered? Can they say "We have done our best for mankind and *will take what comes?*"

2) We as a people are governed, and thereby allegedly protected by those who govern us. We now discover that we sought protection by dependence on the wrong kind of power, forces which failed to provide the kind of protection we needed.

The persons who govern us are called politicians, their game is called politics. These are the gentry who have mixed our salad. It is they who have supplied us with the sugar teat of the church to keep us quiet while they plied their gentle art of painless bondage. To say we were lulled to sleep by prayer is silly. Nobody believed it. At most it was music attuned to what we intended to do.

Will the politicians advance? If one compares the Continental Congress with that of the Civil War period, and then with our present Congress the signs are altogether hopeful. Hopeful because drawn from the advancing civilization; nobler men compose it. But our governing bodies are controlled by a majority. Far-seeing men are too often submerged by the incompetent just as are the common people. The problem is dependent on the character of the common man. Our politicians but hold the mirror up to us. They are selfseeking and greedy, a cross-section of society. They like the rest of us were lulled by pros-

perity, the result of careful planning; made possible by complete complacent stupidity. Now we all can see that only physical armament can protect us from marauding powers. Belatedly we have provided that power which is a source of national pride. Politics does not admit the ablest minds. They will not listen to reason. Only in time of disaster they scurry about and find the type of men who should have been elected to office, and then hire them as dollar a year men. The pride we feel is based on the achievements of these men. Our weakness lies in the fact that a career in statesmanship is impossible in our system of democracy. How many of those who govern us can say "We have done our best for those who elected us and will gladly *take what comes.*"

3) This brings the responsibility home to us, the common people. We gained liberty, by which we mean we overthrew those who taxed our tea but we have not conquered ourselves. We have conquered everything save prosperity in the quest of greed.

Affluence has destroyed our civilization as it developed. All that the optimist can see in this war is that only a future generation will again achieve a prosperity sufficient to acquire wine, no money will be available to attract stray ladies, and certainly we shall not have sufficient prosperity to cause a bursting into song. We can only hope that by the time those who follow us will have achieved a new liberty a higher character will have been developed so that greed will be eliminated.

The hope of the future lies in the elevation of the mother and babe, the Jesus concept, as we see it everywhere today. Society will go up as the mothers wish it to go. There are enough decent people in our country today to have averted this crisis had their desires found expression. The trouble is they are not organized for decency. We need a new organization for the

Development of Character and Morals. Suppose all people affiliated with churches could be united under this banner. All that is needed is for the clergy of all shapes and varieties to forget hate. This could be easily accomplished by eliminating the Old Testament, that and Paul, and retaining only the Jesus concept.

I have classified the causes of our disaster as the church, politics and "We the Peepul." No one group could make such a mess; it has required the cooperation of all three.

The clergy pridefully say they avoid politics. If they performed their proper functions they would make this their chief job. Keep us collectively out of hell instead of one at a time. The reason they avoid politics is that some of their members may be archpoliticians.

Politicians ply their trade because they present such a dirty mess that we do not want to soil our hands, nor lose any sleep while they are most active. They bring disaster because we invite them to do so and render all possible aid.

But we are the chief cause of this global disaster. We are the business people. The clergy have a corner on hate but we have it on greed. We invite the politician to ply his trade because it makes business good. If greed is an ugly word we may say business is to him a game of chance. Nevertheless without the encouragement of crime the politician would find his game profitless. We the people are now *taking what comes* because we planned it that way.

III

It is highly unprofessional for a doctor to offer his services to the ailing public. But there is ecclesiastical authority for offering our services to our brethren when they fall into a ditch, even on Sunday.

This gives me ethical leave to offer our services in the present situation for we are collectively now in a

deep pit. How to get us out is a task I assign to those who got us in. My study is prophylactic.

In a hospital we assign a sick patient to a bath whether he needs it or not, while we think it over. Doctors enter on the chart "impressions," that is the first thing that comes in mind. My impression I record is that what is wrong is that we have not recovered from the results of the acts of Moses when they slew 185,000, but saved the single ladies. Certainly to speak of recurrent war is silly. The human race has been in constant conflict throughout the period covered by this study. War is hate, stimulated by greed, and the need for extra cooks. Only at certain intervals is killing made legal.

This is the problem I aim to study encompassing the comparatively brief period which has elapsed since the day of Moses and Hippocrates. I elect these individuals as the basis of my study because they are representative of definite points of beginning and are based on two distinct trends of thought and activity.

The basic problem is simple. Moses established in the beginning something or other; we can hardly call it civilization, based on revelation which has gone unchanged. Hippocrates on the other hand started by investigating facts, and in so doing started the science of medicine which has constantly advanced to the point where we find our profession today.

I shall need to inquire how the inspired writers of the Scriptures became inspired, how did they show it? If God inspired them, why did He tell Moses about how He created the heavens and the earth in the beginning?

On the other hand scientists have toiled unceasingly, devoting their lives unselfishly in the search for truth which has benefitted mankind. Why did they so toil? They must have been, and countless still are, inspired. If so whence came this inspiration unless there also is

a God of science. This much is certain: No scientist has become melancholic because the truths of science have blown up in his hands, nor has any scientist called aloud to his God because the laws of science have failed.

I shall study the development of the science of medicine initiated by Hippocrates. Suppose the God of science rules the universe. If not loving and kind He is just, operating according to fixed laws, rewarding each person according to his own merits. Each person can educate himself for life. The Golden Rule is a workable concept. Science teaches that one can oppose force only by opposing greater force. The God of science encourages effort. Men by their efforts can achieve a certain kind of immortality. They may live in their labors as these affect future generations. Beyond this only feeling exists. That is the working plan of scientists.

Science has attended to its own business, hence has developed no hate. I shall confine my study to the presentation of the science of medicine because that is the branch I represent. As a doctor he has no church. If he has a religion he makes one out of his efforts on behalf of his patients. His science tells him nothing about a future life. If anyone says he knows where we are going it is all right with him. He is interested only in slowing up the traffic to hell without interesting himself in how to keep from going there. If he looks beyond life he knows nothing; beyond a feeling he cannot go. In the world of infinity at least he is free. There is a world of faith sufficient unto itself, and there is the world of work which must have its own variety of faith to keep it going. He cannot visualize a hell, except that of our own making, hence he has no fear.

IV

These two concepts lend themselves to careful scru-

tiny. The church and science both have a definite bearing on how we came to where we are. Science is made up of facts, concepts proven. The church is based on beliefs, without facts. Science classifies these as superstitions when they come within the realm of scientific medicine. For instance, Galen thought disease was due to "bad blood" so that all one had to do to cure disease was to let it out so good blood could form. This belief continued to hold for centuries, costing countless lives, even clear down to our own George Washington. This fact caused Haggard to observe that "Science and superstition are conflicting forces. One makes for progress, the other retards it."

The application of this observation to the recent past is obvious. Science could have supplied the agencies of protection in this crisis which intelligent men saw impending, but superstition interfered. The people through politics rejected the help available. There is no use to blame the clergy. When Johnnie is coasting down a dangerous street he is heedless of his mother's warning. He believes the coast is clear.

Of one thing can we be sure: the advance made during the period covered by this inquiry came from efforts of individuals working alone or in cooperation. What good has come to this world has been the product of man. The saviour of mankind is man. What has been achieved was done if not in spite of, certainly independent of church and politics. Not one single achievement of magnitude can either organization rightfully claim as its own.

To scientists the beliefs of the church are opposing forces. To study the teaching of the church I shall study the genesis and achievements of Moses in order to learn all I can of the basis on which his teachings rest. He gave to the clergy the Ten Commandments written on tablets by God.

In contrast to this I shall follow briefly the course of the development of the science of medicine. This is based on the Oath of Hippocrates which is as noble a presentation of the Golden Rule as ever was written on the soul of man.

CHAPTER II

MYSTICISM AND TABOOS

I have chosen to discuss mysticism and taboos together because of their close relation. Taboos are prohibitions applied by branches of religion to things of which they disapprove because they are sinful. Why they are so regarded is the height of mysticism.

MYSTICISM

We are told mysticism represents the effort of the primitive human mind to discover first causes. In many respects mysticism is a nobler guide to conduct than were those who are accused of or credited with writing the Pentateuch. Now that churchmen find themselves confused in this day of chaos but persisting in the determination to perpetuate mysticism despite its obvious failure, it is time to study just what it is on which they base their belief in the right to control the common weal.

I

As a background for the study of mythology, I shall at the outset cite a few facts to show how the methods of science differ from mystic belief for I shall present the God of science in contrast with the God of mysticism. For instance diseases were once ascribed to mystic influence, until in bacteriology we first discovered the causative organisms, then studied them, isolating the various varieties until we found one which will produce the disease in which we are interested, or a chemical process which will account for a certain change in tissue structure, or a disturbance of some gland. All these things are mysterious to most people and were so to us doctors until very recent times. By study of facts we have cleared up the mystic beliefs as to the causes of disease. The practical result has been that such

studies have resulted in saving peoples' lives from such diverse diseases as diphtheria, diabetes and goiter.

The physicist and the astronomer deal not with diseases but with forces which once were mysterious. They need above all a mathematical mind and imagination but the flights of the mind must be checked against facts. A weight falls, anyone can see that, or feel it if it falls on his toes; but when the astronomer says there will be a certain eclipse on a certain date and it happens so that we can see it, we do not understand, to us it is a mystery but we believe because the eclipse happens on the day predicted. Those things are a mystery to us, but not to the scientist who understands.

After the astronomer has extended his studies to the limit he uses figures beyond our comprehension, infinite so far as we know, and we call them astronomic.

We finally reach the question: where did the universe come from and who keeps it in space? The celestial system exists, must have come from somewhere and it stays in space. We say the whole thing is a mystery yet it rests on tangible fact appreciable even by our small minds. In the end the scientist and mystic converge but the scientist ends by realizing that so far can he go and no farther, so he pauses, but the mystic does not realize his limitations and he accepts conclusions wholly unsupported by fact. In other words the scientist has cleared up some of the things once mystic. When the child discovers that Santa Claus is papa dressed up the mystery disappears and everybody laughs.

II

The striking thing about mythology is that all peoples have similar explanations for the beginning of things. One must inquire if the similarity of myths is due to some all pervading something, spirit if you will,

which acts on all alike or if this is only wishful thinking. The more we learn the more likely does it become that the myths are all derived from a common source. A study of world religions suggests that they had a common course, varying only because of their struggles to keep up with the advance of civilization. One difficulty is that most of us still have in us subconsciously the old Genesis teaching placing the age of man at a few thousand years. We must now realize that this is a mere tick of the clock in the eons of time. We now know that a human much like us existed some 600,000 or even more years ago because skeletons are found in the Pliocene strata. That from a common point the people spread is likely because the Mongoloid type is found all over the earth, still clearly shown in our Navajo Indians and in various primitive South American people. Yet that myths should retain a like form just handed down by word of mouth through countless generations seems incredible. In my childhood we had a neighbor whose entire life was governed by the signs of the zodiac, varying over such a wide range of from when to wean the baby, to the time to plant potatoes. These things were true to him because his ancestors had all believed they were. Our Navajo Indians believe today that they are the chosen people just as firmly as did the Israelites of old and with as much reason.

However the study of ethnology confirms the belief that there is an all pervading something out of which is developed an attempt to formulate a God. Why all people of the earth seek to build up some sort of a God, all tending to a monotheism is difficult to explain without reaching out into the mystic. Whether we are to conclude that as the intellect develops the God of Moses idea lessens must give us pause.

With the development of science the God of Moses

has been thrown into eclipse and it stands as bare mythology incapable of being used as a stepping stone to the advancement resulting from the exercise of the human intellect. The God of Creation must have had some object in creating babies dumb. It gives them a chance to start anew, to avoid the false conclusions of their parents. We spoil it all by teaching them in their early years to be as ignorant as we are in perpetuating the errors of the past. If we had not compelled them to stay dumb they might have seen millenniums ago that in the development of science is revealed a God manifest in Nature and Nature's laws which grows apace with our knowledge of natural laws.

A vast literature has grown up in the study of mythology in an attempt to gain a knowledge of a deeper human quality. My chief interest is to determine the relation of the beliefs of early peoples with the beliefs of today. This is necessary because the problem today is to account for the strange persistence of the early beliefs as a basis of our religious teachings. Why adherents of beliefs based on mysticism thought it necessary to suppress the advancement of science has not been explained. In other words the problem is not only why did the primitive people believe those things but why do we still believe them and risk our national lives in our persistence in maintaining them.

III

In the study of any subject it is desirable to find first what it is we are studying. If we cannot do this, we can obtain a common view-point only by common agreement. In this instance if we appeal to the dictionary, we find that we are up against, yes, a mystery. We are confronted by the following definitions:

Myth—"a traditional or legendary story, usually concerning some superhuman being or some alleged person or event. It is a story out of the past, connected

with nearly all heathen and pagan religions, beliefs and rites, scriptural stories without a factual basis." To this John Fiske adds "an explanation, by the uncivilized mind, of some natural phenomena; not an allegory, not an esoteric symbol." Professor Santayana writes: "Mysticism is the most primitive of feelings and only visits formed minds in moments of intellectual arrests and dissolution."

Mysticism—"a theory of mystical knowledge, the doctrine of belief, that direct knowledge of God, or spiritual truth, of ultimate reality attainable through immediate intuition, insight or illumination and in a way differing from ordinary sense perception. Any type of theory asserting the possibility of attaining knowledge or power through faith or spiritual insight."

Bertrand Russell holds that "Mysticism is the inspirer of whatever is best in man," . . . "The true union of the mystic and the man of science, the highest eminence that it is possible to achieve in the world of thought."

It is the tendency to use the broader definitions that confuses the problem. Our religion, that is, the teachings of the church today, is based on myths long antedating the Hebrew myths. No mystic has been able to inspire it with the nobler spirit of mankind. On the other hand many scientists are mystics in that they awaken in the night with thoughts beyond their reach in a waking state. I have referred elsewhere to the labors of Banting as an example. Music inspires the mystic, and that is fact, not a myth.

These definitions still leave us with the question: What or why is a myth? After one has engaged in the study of mystic beliefs one feels that this adds only to the confusion. Mystic practices are on the whole beyond understanding and like the teaching of the church can never reach beyond belief or feeling.

We are warned at the outset that mythology is not religion. Then the converse must be true; religion is not mythology. If not, then what is it? Anderson defines a true myth as a story which satisfies curiosity about causes. Experience shows nothing is so durable as a myth. Against the mythology of basic religion the billows of the ocean of truth have washed in vain. At first the product of untutored minds, it persists when truth comes because it is necessary to maintain primary concepts, notably revelation.

It is the ability to satisfy curiosity that is the essential factor in all religions. This is true even when religious practices lead us direct to a state where the mythical character is obvious. Though it satisfies the individual, it has nothing to do with truth and is not concerned with what is best for advancing civilization.

Mythology is identical with revelation. Revelation has no basis other than that provided by mythology. Both start at a point which we dare not question. Moses satisfied the people with his history of the creation as to the beginning. Nothing in this story made an examination of this myth possible. It was in itself valid for all time, if one believes it, therefore qualifies as a true myth. The only way in which we can inquire into the validity of this myth is to take Moses apart and see how he is made up and where he got his myth and what has made it tick throughout the years. It was the best myth ever conceived. People have fought for the validity of this myth. They still get terribly mad at others who interpret the same myth in different ways. Obviously, with the turmoil of mythology and religion, scientists will not need to worry about what we do not know about the ends, either beginning or terminal, which is the sole concern of the church. It is the instability of the middle which now is a matter

of concern to the scientist. We have been born and will die; it is the middle period, living, which concerns us now. Sufficient for the day are the taxes thereof. The validity of mysticism and the church as a guiding principle in this middle period is now brought into serious question. As never before we find ourselves engulfed in a global war since booming canons have drowned out the declaration of faith of our fathers, mystical and religious. It shows more clearly than ever before that prayers based on mythology have failed us. Those who have based their beliefs on mythology need now seriously to consider whether or not a new basis of faith is necessary. Even the elemental law of self preservation seems important enough to cause adherents to question their mythology.

Since the teachings of mythology have been disproved by science without affecting the faith of its adherents, all one can do in both myth and religion is to inquire who said what? Did the writer get himself tangled up in his premises? To ask an honest question should not make anybody mad, but it does. "If a man die, shall he live again?" was asked a long time ago. The question now is to determine the best program for living between the ends of life. The question is not shall he live again, but can we continue to live now, or more exactly how many of our boys will survive the battle for the preservation of the mythologies of today. That is no myth.

IV

I have noted the similarity of myths as to beginnings. Still more mysterious is the universal belief in some future form of life. We even in the comforts of civilization can hardly wish for more of life after we have served our sentence here: then how can the primitive man want more of the hard life he has lived. Yet the ignorant and untutored, poets and philosophers,

all humans broadly speaking, have a faith in a happy landing, a happy hunting ground after death. When knowledge stops, only faith and feeling remain to us.

On first thought it is unpleasant to note that the more ignorant people are, the more firm and universal is their belief in their mystic religions. This in itself indicates the relative position of mythological teachings to human intelligence. The revivals of primitive peoples are the most fervent there are. To say they have a greater faith in a future life than the more intelligent would be overlooking the fundamental facts. Their revivals express not faith in a future life but a greater susceptibility to the emotions which underlie what they do. The more primitive the religion the more it reflects the phallic origin.

The myth of the fear of death is a myth. Death has no fear, nor is it concerned with hope. I have been impressed with this fact when sitting beside a deathbed. The scenes are all the same. All people when they face the River Styx, do so without fear. The truth is that when we face the end we do not know it. In the face of death fate is most kind. Churchmen need not look to the deathbed for confirmation of their theories. It is interesting that a frightened animal will seek to escape, but a sick one goes away to die quietly alone. Humans are just as intelligent, they know when death beckons and accept the verdict. This is to me the clearest evidence of a future life. Mysticism should be reserved for those who are not sick, only scared. It is not possible to frighten a dying man. Mystic practices at the deathbed can have no rational basis. It is solely the idea of the clergy. The dying are content.

V

The above abstract discussion brings us to a point where we can profitably catalogue the myths of the various races. We propose to study a number of peo-

ple laying stress on those myths which have come down to our time and are still reflected in our own beliefs. The chief interest lies in the search for something inherent in mankind which can be called spiritual. This seems to be the best way of getting a clear idea of how we came by the inspired persons who wrote our Old Testament. We may now feel that they played the wrong hunch. Yet the mere fact that they talked big is significant. Of course, the idea that they were inspired was discovered later on. This is of the greatest importance because, judging from catalogues of our theological schools, the study of these occupies very nearly all the time of the students.

It is both convenient and fitting that we begin with the study of the myths of the people who occupied and yet occupy our continent. Many of us have seen first hand those mystic practices or have heard them described by eye witnesses. Most of us Westerners have seen Indian dances and have seen them in their normal habitats. There were some good Indians.

Most of the earliest accounts of our primitive people have come to us through the writings of the Jesuit missionaries. We owe much knowledge of the early history to these heroic men. They were intelligent men and their reports accurate, their purpose sincere. The knowledge presented by them has been augmented in more recent times by the accounts of countless travelers. The observations of eye witnesses are of varying value depending on the personality of the individual and the extent of his knowledge. The viewpoint of the plainsmen has been much colored by civilizing influences of the Winchester rifle and Colt's six-shooter—and firewater. In recent years our study of the primitive people has been much augmented by the study of ethnologists. Mythology now receives the exact analysis of science. Furthermore this study enables us to

go back eons of time before recorded history and learn of peoples now extinct.

As a matter of convenience we may start our studies in the Northland of our own continent and advance southward.

ESKIMO

The mythology of the Eskimos is remarkably intricate considering how dumb we think they are. We are at the outset confronted with the alleged visit of Vikings from Greenland and Norway along about 1006. If visitors from these countries really contacted the northern people at that time, they seem not to have influenced the Eskimos in their beliefs or influenced their complicated mythology. Much more plausibly may we date their origin from the so-called lost tribes of Israel, likely a long time before the history of the Israelites began. Their mythology is very like the Indians further south. They must have had a common origin.

We are indebted for information as to Eskimo mythology to the writings of Rasmussen more than any other man. The most interesting of their beliefs is that the unseen powers resided in stones and bears. Most remarkable is the myth that a man was eaten by a bear and was vomited up again in four days; the man and likely the bear were better than ever after this mutual contact. Remarkable as that is, the man became the superior of the bear and commands him as his helper. Thus Eskimos go Jonah one better. The descendents of the Eskimo Jonah who resisted the gastric juices of the bear became a powerful people and were endowed with magical and healing powers and had eyes that saw hidden things. The superior person in their spiritual mystic economy was a woman and they called her the Food Dish. Quite modern that. Her modern symbol was a can opener we may infer.

This observation is my personal addition to their mythology, a conclusion arrived at by deductive reasoning.

The Eskimos attained the conception that there is a region above and one below the one they occupied. They were not in agreement as to which was the most desirable abode. We are told that the good and those who perished by accident or violence, also women who die in childbirth, pass to the upper land indicating that this was really the more desirable abode, particularly for the women. We are also told that there are four underworlds thus going Dante one better, he had only three. They also had a story of a deluge which destroyed most of the life on the earth. They do not commit themselves to any very specific details concerning this event.

Bodies to them were only instruments of the souls which owned the bodies which may be born and reborn not only as a man but also in beasts. The soul of a dead relative was born in the new child. This is a remarkable recognition not only of the laws of heredity but also the appreciation of the fact that we live in the lives of those who follow us and thus achieve a sort of immortality which is unselfish and exists as a stimulus to augment our achievements, at least it is capable of such interpretation.

Out of all this they evolved the belief that death is not final. They had a moral sense and a fear of the great evil, sickness, and in consequence they did penance to dissuade it because diseases were so fatal. We find in final analysis that this people evolved both a hope and a fear. We could learn a lot by a more careful study of their beliefs.

AMERICAN INDIAN

We may pass from the northern people to the forest tribes of American Indians. Our information here has come to us through the missionaries, anthropol-

ogists and ethnologists. We are at first struck by the fact that they were much more cruel than their northern contemporaries. This it seems had the basis in their love of ritual expressed in song and dance and sex orgies. Perhaps the Eskimos were immune to such temptations because of the low temperatures of the North, discouraging bathing beauties and prophets in flowing robes. They had a secret idea of deity, despite their ingenious cruelty, who alone could reward victory. The sun and the sky appear to have formed their idea of a Supreme Being. They had a myth of creation and a deluge, a fall from heaven, a sinful choice bringing death into the world. This led the Jesuit Father De Smet to exclaim that the soul of man is naturally Christian. At first thought we think that their dominating characteristics, as above noted, were their sex orgies and inherent cruelties out of which they evolved a hope and a fear and had an idea of a supreme deity. Yet Father De Smet was right. Beyond those primitive practices we must not overlook the fact that they had a picture of a Supreme Being quite worthy of being written in capital letters, and a sense of right and wrong. I am glad to take this occasion to emphasize this fact, for as stated elsewhere, I feel that there is something inherently noble in the human heart which has been ignored in our studies and obscured by our own cruel civilization.

Moreover if we search for the basis of their belief in a Great Spirit we find that they did not conceive it as manlike but a power invisible, immaterial, and uncreated—the Great Mystery. They regarded the pipe as emblematic of the God of Peace and War. Thus they regarded smoke as the means of communing with their God. We would do well to study these people and consider that their god of the universe has not been so cruel as ours has been. This difference

between them and us is noteworthy: they used tobacco smoke, we use smokeless powder.

One tribe, the Chippewas, had four layers of heaven above and four below. There was a reason for this for four was the tribe's sacred number, derived from the fact that there are four quarters of the world.

The guardian of the upper world was the Thunder God, Hino by name. The Thunder is an invisible spirit and has as his chief assistant the Golden Eagle, thus anticipating our 20 dollar gold pieces. It is interesting to note that they were acquainted with the constellation Ursa Major, the Great Bear. They explain its presence, as did the Eskimos, in that hunters chased a bear into the heavens and it remained fixed.

The nether world was pictured as a sunless realm. They seem to have had as much trouble as we do as to who populates this region and the explanations are as involved as ours. They do state that the caretakers of this region had trouble in keeping their charges in their place because they continually wanted to rise up to the earth. Evidently there was no world war or they would have been satisfied to stay where they were.

The modern tribes vary some in their beliefs. One of the most interesting of these variations is the story of the deluge. The details are complicated, but the story is essentially that the whole earth was covered with water, depth not stated, and everything was drowned. Messou, their Noah, sent out a raven to find a piece of earth with which to create a new world. The raven found nothing so he sent an otter; this animal also failing, he sent a muskrat. The animal brought up a bit of earth the size of a grain of sand from which Messou rebuilt everything.

Another version is that the Great Hare assembled the other animals on a raft. He sent first a bear, then a muskrat to find the earth. The latter returned after

spending a day submerged and in its claw held a single grain of sand and from this a new world was formed. It is interesting to note that several tribes of Indians of the Northwest had a flood and they rode it out on a raft. These people were smarter than the author of the Hebrew Genesis—they did not give the dimensions of their raft so that future mathematicians could not check up on the cubic foot space available for quartering their animals.

The Alonquins had an elaborate notion of the village of the soul and like their flood the story has many familiar rings. It seems an Indian wandering at a great distance encountered a giant which frightened him and he did hide himself. The giant said, "Son, be not afraid. I am the Great Hare. I will now give thee a companion"; which he did, then continued, "Thou, man, shalt hunt, and make canoes, and do all things that a man must do; and thou, woman, shalt do the cooking for thy husband, make his shoes, dress the skins of animals, bear the children, sew on buttons and perform all the tasks that are proper for a woman." This obviously is a free translation. LeJeune relates another tale: how "a certain savage had received from Messou the gift of immortality in a little package, with a strict injunction not to open it; while he kept it closed, he was immortal; but his wife, being curious and incredulous, wished to see what was inside this present; and having opened it, it all flew away—what flew away is not stated—and since then all the people have been subject to death." Thus in the mythology of the Indian, as in ours, woman's curiosity is blamed for all our troubles. In another tale, this time from the Huron country, the fateful journey to the Village of Souls is undertaken by a man who has lost his beloved sister. Her spirit appears to him from time to time as he travels, but he is unable to touch

her. At last, after crossing an almost impassable river, he comes to the abode of one who directs him to the dancing-house of the spirits. There he is told to seize his sister's soul, imprison it in a pumpkin, and thus secured, to take it back to the land of the living, where he will be able to reanimate it, provided that, during the ceremony no one raises an eye to observe. This he does and he feels the life returning to his sister's body, but at the last moment a curious person ventures to look and the returning life flees away. Here is the familiar tale of Orpheus and Eurydice.

It was from a historical personage that Longfellow took his "Song of Hiawatha" but it becomes involved in mythology which allows us to see the intimate association of fact and mythology.

This leads us to consider the Gulf Coast Indians. We have here the advantage of mythology still practiced, to be studied first hand by competent students of all phases of life and in addition the unveiling of the past by the archeologists. So far as this study is concerned we are interested primarily in the fact that they were sun worshipers. Their god was a good god, worthy of being spelled with a capital. They had their triad, too, water and fire in addition to the sun.¹

Since their chief agricultural product was Indian corn, quite appropriately when roasting ears were at their best, they had their feasts at which everybody ate too much, just like our Thanksgiving dinners. They made it an occasion of rejuvenation. The women burned their clothes, mats, cooking utensils, replacing them with new ones, reminiscent of our recent aluminum drive. In harmony with the general rejuvenation process they ended their feasts by purgation. This exhibits better sense than to wait and call the doctor the next day to relieve an acute indigestion.

Their mythology contains several other points of

interest. They seem to have used the ark idea of the northern neighbors as an explanation of things. The animals were all in the sky world and all was water below. A water beetle was sent down to the water to find a landing place. It darted about without results and finally dived into the depths and brought up a bit of mud, and about this the earth developed. At first all was dark so they induced the sun to make a daily trip from east to west. At first this made everything too hot, so they raised the sun up. They continued this elevating process until they got it up to the seventh height which gave the right temperature. Then everything was all right. They discovered what is now California weather.

We note here the familiar number seven which has played such a great role in the affairs of man. Many a serene person will recognize in that the expression of "the joys of the seventh heaven" as the day when he gave up the struggle and allowed her to name the day. Funny thing, here the process was reversed. He started in the seventh tier and descended downward where the heat was greater. This is variously played up in mythology under the general heading of the fall of man. They also had a nether world apparently equipped as well as ours. There seemed to be no real preference and one had to fast and have a guide before one could enter either place. There was no fire there and they had an awful time starting some. Finally after trying many animals, a beetle wove a basket on its back and went out and returned with a chunk of fire.

The Choctaws have a story of how they tried to build a mound that would reach to heaven. They chattered until the thing fell down. They also had a deluge and only those were saved who got into the boat. This tribe recognized that they were inveterate liars but seemed to have indulged in tall tales only

for amusement. This gave origin to the Br'er Rabbit stories and they find their exact counterpart in the bedtime stories of our daily newspapers. Like Santa Claus only children are supposed to believe them.

I have always been interested in the Navajo tribes. Of all peoples they have been the most decent. I can but regret that when the tribe of Israel was "lost" they did not take me with them. They have remained a cultural unit. Their religious rites were without hate, their poetry makes the songs of Solomon intolerably vulgar, adultery was not nice and they classed the question of concubines as a species of it. Their God, Yei, did a lot of talking, but he never bawled any one out, was kindly to mankind and never consorted with the devil. He created the world much after the pattern of Moses. They discovered that they must have light and they did the only sensible thing, they called on two ladies to light the candles. They also had the women say the prayers.

They had a material girl who had twins by a god. One was born blind, the other maimed. They were poor and had a terrible time of it. Finally the natural father confessed to the hoax and the twins became normal and lived happily ever after. They also had twelve men who looked after things. Just what they were good for we have not been told. They just played with shells and were apparently a decent lot, at least they did nothing to get their names into print.

Today these people live peacefully, true they do funny stunts just like we did before we discovered antitoxin for diphtheria but apparently they have not yet invented sin. Their chief concern seems to be that those who shed tears for the underprivileged send their girls to schools in which they are exposed to Christian civilization, and they come back no good. They refuse to herd sheep but chase after boy friends.

It seems people don't miss clothes until after they have worn them awhile and then take them off. Nature doesn't emphasize anything. This is why the Fiji Island ladies appear so much more modest than our bathing beauties. They do not have the thrill of strip teasing and it shows in their faces. Their scanty clothing is not worn from any sense of modesty but to protect themselves from the annoyance of insects, also possibly from mice and men.

As noted elsewhere the primitive peoples had and have intelligence. We can say they are only dumb. They are to us on the ground floor. We are on the first rung of the ladder looking pityingly down on them because they are ignorant. This makes us the subject of our own admiration instead of looking up the ladder which disappears into the skies. A good look upward would cover our pride with humiliation.

INDIA

Going to Asia we find that the Indian mythology starts out with a record in the oldest Veda commencing about 5,000 B.C. with three great gods, the earth, the air, the sky. This is somewhat spoiled by some complicated subdivisions. The sky or heavens, like the earth, has rocks and mountains and caverns. The latter when dripping water are identified as cows. To anyone who has had experience with kicking cows this is not far fetched. How the sky is held up without rafters puzzled them but they met the difficulty by assuming a complicated system of pegs. The sun gets back to the east, after traveling the diurnal trip to the west, by simply turning the light side up and then going back east to start all over again in the morning.

The creation they explained by saying that heat created life out of undifferentiated waters. Whereupon desire arose, the first seed of the mind. This desire created the gods—not bad and quite modern. At this

point the account breaks into poetry, therefore becomes incomprehensible. So far as I can see when a piece of writing is hopelessly obscure it is called poetry. One can make out the gods were once mere men. How they became immortal is uncertain. They had their troubles for they complain that priests "speak in diverse ways so that no one knows which one is which." They simplify their pantheism by assuming that there is a chief god. In order to make no mistake they addressed all gods something like our Father, Son and Holy Ghost, only they had thirty-three; divided into groups of three. The gods were anthropomorphic and needed to be fed. They wore clothes, carried weapons and drove in cars, big elaborate vehicles with stone wheels. To furnish milk they had hecatombs of bulls.

The gods sometimes got drunk on bull milk. When they fought they killed each other but did not form new sects. To the non-parsimonious who paid their pew rent promptly the gods were kind but the niggardly they punished. How, is not stated but we may assume they did it by preaching longer sermons.

As usual when they find themselves in difficulty they break into poetry. This is the case when they come to discuss the dead and the spirit. The latter is suffused with magic and witchcraft.

The chief god is Dyas, the sky. He corresponds to the more familiar Zeus. The child, it is worth noting, is accorded a high place with the gods. When they talk of the child they break into baby talk so that they must have thought it was all right. The chief god was regarded as a bull which bellowed downwards. No moral attributes were attributed to him. He likely was the forerunner of modern ecclesiastic manifestos.

Somehow Varuna breaks into the picture. He is omniscient, omnipotent and omnipresent. But he also

writes poetry in which it is alleged he hates and drives away falsehood, and liars he afflicts with disease. For the repentant sinner he unties the rope which binds him to his sin. All, including children, when praying must include supplication for the forgiveness of sin. Those who did this were assured of immortality.

All this has a very modern ring. We get an idea of what the sin was for or from which everyone must ask forgiveness for if one receives a sin pardon in marriage at the wedding rite he takes her by the hand and blesses her. This is regarded as a very noble thing to do. But we are left in the dark as to who does this, the officiating clergyman or the groom. This question does not admit of more specific details, not in print. Recorded history tells about it.

Whether related to marriage or not we are left to guess but following the event things become complicated and even the gods quarrel and form separate sects. To express their differences they burst forth into poetry in order to obscure things still more. One makes out that there were nifty fighters when discussing doctrinal differences. One got so mad he hitched up 1100 horses to a golden chariot. He drank three lakes of "soma" and ate the flesh of twenty (or a hundred) buffaloes.

The earth had gods too. It seems that when one drank enough soma he became a god and wrote poetry. This god did not hate liars. On the contrary he gave examples of how a real literary artist works.

The Brahmans had a mythology of their own but it has no modern flavor. And the epic poem Mahabharata saw more gods than a subdeb sees at an army camp. All these wrote transcendent poetry, which of course only tends to confuse. Since these bear no relation to the pre-Moses developments they may be omitted.

AFRICA

It would seem that when we approach the mythology of Africa one would find it in pure form. Some writers believe that they had no sense of a god until taught by missionaries. However certainly this applies to but a few instances. On the whole we may be sure they created their own mythology, or brought it along from the primary source, because they had it long before missionaries were invented.

We find some very interesting things. Their god, who caused earthquakes, had a mother who was mortal, and she bore this god a son. Their high god dwelt in a material heaven. The heaven was the sky. He dwelt on earth for a time but he became dissatisfied with the population and retired to heaven. Yet he did not lack curiosity and returned to earth now and then to see how the folks were getting on. These visits were signalized by shooting stars.

There are many variations among the various tribes. The Bushongas have a narrative of Creation surprisingly suggestive of the account of the Creation as described in Genesis. Bamba, they say, one day had a severe abdominal pain and vomited the sun, moon and stars, likely including the planet Venus. They tell of an elephant which swallowed a woman and got sick at the stomach and vomited. Death they explain by the fact that the world became overcrowded, that it was necessary for people to die so that those remaining could get air. They had ghosts which most frequently had the form of snakes. They believed in a future world the entrance to which was through lakes and pools.

EGYPT

Egyptian mythology is mentioned among the last because it is of special interest since the development of civilization seemed to be independent of their

mythological concepts. The one group had the baby, the other the mythological gods it would seem.

At the time of the Pharaohs they had a monotheism as indicated by the use of "The Eternal" and similar expressions. Some writers assign to them a symbolic polytheism because they used different terms to indicate deity. This is easy to explain: suppose some religious historian a million years from now should look over our literature. They will gain the conclusion that we are at this date a polytheistic nation. They will naturally conclude that each sect represents a separate god, and they will be essentially correct.

The other interesting point is that around 4,000 B.C. they had a pretty decent civilization as described in the chapter on Conscience. At the same time their religion was as wildly mythological as the rest of the contemporary tribes. One might even suggest that the Hebrews specialized on the development of religion, the Egyptians on civilization. If we assume this the subsequent history of the two people rises up to puzzle us. One can say in passing that the difference lay in the difference in organization. Which again would demand that if we want to preserve a civilization there must be an organization to protect it. That is the trouble now, we have no organization to protect the best in our civilization.

This allows us to believe that the development of civilization and religion are not interdependent. In fact our present relation of church and our social status is proof of the same thing. Just now we have the spectacle of a major nation without a church protecting itself against barbaric invasion. Time only will tell how civilization will fare.

AUSTRALIA

Most of us look on the Australian aborigines as the lowest of the human race, hence the term used to desig-

nate them. One is surprised that their myths of origin are the finest of any people. There are none of the things found in the legends of most tribes. Even their flood myth has a dignity lacking in all others. Their marriage legends would be an improvement on the laws of our own country today. The sun-god created things, she was a woman and the gentle hand of woman is reflected throughout. She was the Great Spirit. We scientists should claim her as mother.

This Great Spirit had a son, Nurunderi. The following is his charge to his people: "Children, there is a great spirit above whose dwelling place is heaven. It is his will that you should know him as the whole spirit of whom you are parts. He is your provider and protector. It has been my pleasure to give you the privilege to sojourn a while in a bodily state to fulfil my great plan. Remember, children, your life is like a day; and during the short period you are on earth you are to educate yourselves by self-control, and to realize that all of you are parts of me. Live as children of your Great Father. Control your appetites and your desires. Never allow yourselves to become slaves to your appetites or desires. Never allow your minds to suffer pain or fear, nor to become selfish, for selfishness causes misery to yourself, your wife, your children, your relatives, and those with whom you live. Selfishness is not of the Great Spirit. Cultivate everything good. Be moderate in eating and in pleasure. Be generous to others. Cultivate a healthy state of mind and body. Be guided by pure morals. Show kindness to others, remembering that they also are a part of that Great Spirit from whom you came," (quoted from W. Ramsey Smith, one of the greatest of English anthropologists.) It is interesting to try to figure out what would be the difference with us today if we might have inherited this instead of the Ten Commandments. One can but marvel at the nobility of

their attitude toward children, parental responsibility toward children, and their attitude toward marriage—all that without one tinge of vulgarity. It all seems incredible.

HEBREW

It is fitting that we should reserve until last the consideration of Semitic mythology, particularly the part of it which concerns the Hebrews. The tales of Hebrew mythology have endured right down to the last clergyman's doxology, and have had a greater influence on our national life than has the Constitution and the Bill of Rights.

The literature on this subject is so vast, and withal so complicated that only a scholar can follow it. Semitic mythological literature has been much clarified by the investigations of the archeologists. It is sufficient for my purpose to note only those things which bear on the problem which concerns me here.

First of all we meet the sun-god and the moon-god; sometimes one, sometimes the other is dominant, reminding us of a modern family scene. This is complicated by the entrance of Venus and suggests at once the familiar Biblical triad as well as the advent of the daughter afflicted with spreading hips in the modern family.

The Accadians it is interesting to note had a moon-god called Zuen, pronounced Sin we are told. The early appearance of Sin is interesting though no connection can be traced to whatever it is we are all born with or in.

Out of this comes the supreme deity of Hebrew monotheism. This primitive deity reflecting the father of God was creator of all the people.

One interesting point is worth noting. The researches of archeologists turn up a damsel, not exactly a lady because she wore even less clothes than a bathing beauty. Her name was Istar and like Aphrodite

she was a patron of "lewd love." That distinction is far in advance of our present concept since we use the simple word "love" to cover all phases of whatever it covers, or does not cover. That lewd love is capable of cultivation is obvious from study of the Scriptures. If the corollary comes to be recognized, that lewd love can be modified by true love, we will at least be headed in the right direction.

The greatest shock I ever received was when I first read in Langdon's summary of Hebrew mythology the following: "The myths of Creation in Genesis (i-ii), of Paradise and the Fall of Man (iii), and of the Flood (vi-ix), are admittedly of Babylonian origin, and all three in the Hebrew account are compiled from two versions in which Elohim or Yaw appears respectively. It is extremely difficult to decide which of these sources is the older, but if the Habiru are the Hebrews, clearly those sources of these myths in which the deity Elohim appears are the originals."

It is a most unpleasant task to try to trace the relation of Yahweh and Baal and from them to the God of Moses. Baal was not a nice boy and he had to be disinfected so that he smelled better but he has not been eliminated, not yet. His relation is that of a bootlegger to some prohibitionists. We cannot tell just where mythology ends and our religion begins. The difficulty is that there is no dividing line. Hebrew mythology is still with us modified only by the advance in the human intellect to a point where it can discern the difference between truth and mythology. At present they exist side by side. Before anyone preaches texts from the Old Testament he should acquaint himself with Hebrew mythology.

Inseparable from mythology is the history of serpent worship, the hooded serpent particularly. The literature is vast, well summarized by Oldham. The whole picture is sickening, only relieved by the silliness of

their shrines. However by reading it one comes to appreciate how very far civilization has advanced despite the fact that we have not fully divested ourselves of the worship of the hooded serpent. And to think that today 40,000 medical officers are wearing the caduceus which consists of a staff and two serpents. Certainly nothing can be further from phallic worship which the snakes represent, than the medical man on the battlefield lending his all to the neutralizing of the end result of mythologic teaching.

VI

It is easy to descend to facetiousness in discussing the mystic beliefs of people. Nevertheless we should not lose sight of the fact that it represents primitive minds struggling to find their place in the universe and the constant struggle to find something higher, to find itself a god. The impressive lesson to learn is that to be dumb is to be much nearer the truth than to believe something that is not true. To divest ourselves of the age-old beliefs is the problem of the future. Only the sins of the past cause us to adhere to them. That is the unforgiveable sin.

I am aware of the great part mysticism has in the religion of today. Josiah Royce says that "It has determined more than half of the technical theology of the church; the inaccessible refuge of the nobler heretics is mysticism." It is unfortunate that he did not say which part is not mystical.

Most of us are not concerned about from whence we come but do have some curiosity as to the terminal end, perhaps only mildly so. Just what the mystic contributes to the weal of mankind is a question. If not in intent, in result it is selfish. The twenty-third Psalm was made for him, a sort of social security in which all one needs to do is to get himself born and henceforth he will be taken care of. It is the idealistic state

of the tomcat it seems. He does not even need to exercise himself on election day, any more than the average citizen does.

Be this as it may the present inquiry has to do with the searching for facts which has prevented religion from serving mankind. If mysticism is necessary for the preservation of salvation even so we need to know the truth. It would seem that mysticism is concerned chiefly with the preservation of certain sects, to the preservation of the church as a political organization for the benefit of the organization. That mysticism has contributed anything to the brotherhood of man and the establishment of world peace does not appear. True, mysticism and peace may live together as the Navajos have shown. It was the particularly cruel type of Moses that has brought so much suffering to mankind. When mysticism is complicated by cerebral aberrations the problem is worse, but it also may support many acts for which the world has had to apologize and has yet more to apologize for.

Eschatology has had its day. It is time to give science a hearing. Eschatology is defined as the doctrine of the last or final things, as death, judgment, the future state, the branch of theology dealing with them. It is interesting to note that a book has recently appeared bringing mythology down to date, preserving all the elements used in times past to stimulate hate. Reverence for our semi-savages is a noble sentiment. We should have a companion volume on "Newer Methods of Grinding Stone Axes."

TABOOS

Taboos are of several kinds some of which have a religious implication, some a moral inhibition. But the food taboos have both a dietary and a religious significance, both presented as inhibitions. Just what might be expected to happen if they were ignored can-

not be approached by observation, in fact observation only heightens the mystery because it does not appeal to one's intellect; on the contrary it contributes only to our obfuscation. Modern dietetics has progressed to a point when one versed therein can tell what is best for a given person to eat irrespective of the variety of his religion, if any.

A consideration of food taboos, to one who does not understand, must be approached in a frank spirit of facetiousness. Only in this way can one retain the proper measure of self-respect and yet retain the integrity of his cerebral circulation.

We might begin by declaring that food taboos are a form of mythology which has been brought down to date but this would not be just. They thought there was a reason just like we thought sulphur was good for diphtheria. We were neither dumb nor dishonest. Circumstances made it necessary to do something and we got by with it until something better was discovered. The why these practices are continued need not concern us here. It is all pure mythology. They are as reasonable as the fad of feeding children spinach on the recommendation of Pop-Eye the Sailor man.

No department of science has made greater advances than that of dietetics. As this science develops the more astonishing is the persistence of the adherence to food taboos. It is just another example of how simple it would be to solve problems if it were truth we were after. In our staff dining room a few years ago a number of creeds were represented with the various taboos of their sects. Yet at the end of this association, all, including the plain heathen boys who ate anything edible, all came out the same, all distressingly healthy.

It is interesting to note that in taboos developed the idea of sin. Sin is a broken taboo; the reverse also is true. This is of interest because nowhere is the in-

tangible nature of sin more clearly shown. Sin seems to be something the other person does which we do not do. Personally I would put down the eating, or the offer to be eaten, of stewed tomatoes or spinach as a major sin. Singer observes that the theory of sinfulness of broken taboos is somewhat contradicted by the growing skepticism arising from experience. I reckon this means that if you do a sin and it doesn't upset your stomach it is not a sin. It ceases in other words to be an ecclesiastic problem and becomes a matter of the physiologic process of digestion. Singer even suggests that taboos are a holdover of a prelogical age and were originally intended to protect himself, through ritualistic means. Whatever that means it should be a great comfort.

Taboos flourished from 1000 to 600 years B.C. Some things were banned because they were unclean, others because they were sacred. A few only need to be noticed. Certain foods on certain days, cloven and unclean hooves, all flesh.

Swine have had a most checkered career and hence may be considered more fully. In Cypress we are told the swine were connected with the worship of the Semitic Aphrodite and Adonis. That is base slander. My early years were spent in rather intimate association with swine and I can say that they are without exception of exemplary morals. Swine meat was forbidden by Mohammendans and Egyptians. That pigs are unclean also is not true. Pigs are among the cleanest of animals. They avail themselves of such toilet facilities as are available and they eat the same things some of us humans do, including spinach and stewed tomatoes. True they do wallow in the mud but this is a social urge to them and is but a part of their make-up just as maturing ladies have mud plasters put on their faces to prevent the wrinkles already there. They, both the pigs and the ladies, are clean underneath.

Homer had the right idea, he said pigs are divine. This is confirmed by the present price of bacon. I would only be satirizing myself if I suggested that the prejudice against pigs is because they are pug-nosed, pure Aryans perhaps.

The far reaching effect of taboos is interesting. Moses knew of trichina occurring in pork. To avoid infection by this parasite he forbade the eating of pork. In his ignorance his drastic measure was justified. Had he had the knowledge we now possess he could have told his people that if you will boil your pork for five minutes the trichina will be killed and you can eat the pork with impunity. We know this but the taboo continues and we get plenty mad if anyone asks us why we do not eat pork. Nothing to do with sin or salvation. The sin lies in refusing facts when they are available.

If we would just apply all we know today all taboos would be wiped out. It is impossible to calculate how much this might do to eliminate the hate we now carry along.

That current atrocities are due to the quarrel between the proper shape of our facial appendages someone is certain to suggest. Then someone will suggest that the fish is emblematic of small fish, suckers in piscatorial lore. At any rate the abandonment of all taboos would remove all possible misunderstanding without increasing the labors of modern gastroenterologic specialists.

According to II Kings, iv, 43, Elisha ate tabooed food with impunity. This is not so startling for he had small respect for precedent, shown by other acts.

Milk comes in for special consideration. In Exodus 34, we are told that "Thou shalt not seethe the kid in its mother's milk." Seethe means to boil which would require a lot of milk, besides it would inconvenience the baby. Modern parlance would require Mr. Exodus

to say "Don't Pasteurize the baby with the milk." This admonition is supposed by some to have originally been contained in the decalog. Why this prohibition no one has attempted to explain unless it is because milk-giving animals were scarce in that climate. At any rate we take no chances. We do not, indeed. We raise our kids on anything between Mellin's food and Pablum with orange juice.

Another interesting thing has persisted in that the first of everything was preferable, the first-fruits, the first-born. One of my earliest observations was that the minister always got the first piece of chicken, and also alas, too often the last one. According to Frazer the Australian uses first fruits with which to regenerate himself spontaneously. If farmers had to record the first-born in the case of pigs it would entail closer observation than he is wont to give at farrowing time and also require some means of identification. The firstling idea has always obtained in cases of regal succession because it was the most certain. Kings naturally were anxious to leave an heir so the first-born was the natural choice. This made it necessary to designate one lady as queen. Otherwise the determination of his first-born would have entailed a complicated system of bookkeeping. But the firstling idea extended further, in times past the first-born, and the first-born son at that, inherited the property. In those days this was due to the same reason that kingly possessions went to one son, namely the difficulty of division. While entailment of property to the eldest son is still practiced in England and some other parts of Europe, on this continent parents take pains in their last will and testament to treat their children equally, except of course when they get mad at some of them.

The question of property leads us to the question of dough. Nehemiah, x, 37, directs us to "bring to the house of our God the first of our dough." This may be

the origin of tithing. If we owe one tenth to the Church naturally it would be the first tenth. The first dough was particularly desirable because it was the most certain. Perhaps this is the origin of the modern slang expression. Certainly it did not reach its full fruition until the income tax mathematicians plied their noble art. Like the minister above noted they got not only the first but also the last, and what is between. No taboos in their vocabulary.

I refuse to discuss the taboos of drink. Singer says it was invented to restrain the clergy and kings. I know nothing about booze and my knowledge of the private lives of those dignitaries is confined to what one finds in books. The taboo so far as I can discover lies in drinking bourbon less than four years old. I also refuse to discuss sex taboos for the same reason. Anyone desiring more intimate knowledge will find it in the Old Testament.

Kings it appears were particularly susceptible to taboos. If they ignored them it brought bad weather and crop failures. I was brought up in the belief that these calamities, including colic in horses, was due to the Democratic party. I mention this only to show the tendency of the primitive mind to explain everything to their own satisfaction, based largely on heredity.

It is sufficient to show that it is difficult to clarify food taboos. They lack the dignity of myths. They cannot be fitted into the definition of religion. Perhaps they occupy the same position in ethics as does the space behind the small boys' ears to hygiene, things just overlooked. Certainly food taboos bear no relation to the science of digestion and nutrition and equally certain they are innocent beliefs. The only difficulty they present is that in our social relations it involves a more intimate classification of our friends than we are prone to possess. It involves both a zoological classification and an intimate knowledge of his-

torical events plus an accurate observation of the calendar. A failure to recognize these details serves to bring to our attention that taboos do bear some relation to hell, particularly on an occasion when an individual is confronted with a good appetite and tempting food.

Our American Indians have interesting taboos. The food taboos of the Navajo are simple and are applicable to any member of the tribe or any group. They are not true taboos. The first is: never stir cooking food with a knife, just not elegant, like eating pie with a knife is with us. Even a melon must not be stabbed point first. Ground squirrel and prairie-dog may be eaten if cooked below the ground. Never eat flesh of any animal struck with lightning, even if not killed, it is ever after taboo. Never eat food of an animal if bitten by a snake, even if not killed. Mutton, veal or venison must not be cooked with corn during July because it will cause indigestion. The flesh of a porcupine may be eaten if its face and claws are hung on a bush. Never eat flesh of an animal which has been picked up by a cyclone. The whirling of the animal caused by the wind will cause a similar disturbance in the semicircular canals in the ears of those who eat the flesh. Bones must not be broken before or while being cooked. Red meat must not be cooked without salt. If eaten without salt it will cause nausea. The flesh of a crow must not be eaten, not even by defeated politicians.

Considered as a whole these Navajo regulations are scientific, they have reason behind them, even if they are wrong. Therefore at worst we must classify them as rationalized taboos, they are not based on a knowledge of sin.

It is of interest to note that in India in which castes are rigidly divided, taboos are rigid. The three upper classes eat no meat. Next the lower classes eat any-

thing except beef. The very lowest caste, so low that when you look at them you drop antiseptics in your eyes, may eat anything—just like us.

To an outsider it would seem taboos serve to keep the individual's mind on his religion, to make it the center of his early thinking. It bears the same relation to religion that the collection of old aluminum pans does to war effort. If the minds are kept busy on trivialities it keeps them from considering the sense, or the lack of it, of the things we do. Whatever the reason there can be no doubt that the whole question is bound up in or with mysticism and the interest we have in it is why it is brought down to date. If one wants a simple lesson in separating facts from fiction he will find it in the study of taboos. It seems that any mind equal to that of a squirrel could estimate their true value. A squirrel does have some sense of humor. Just try to feed one a marble encased in a nutshell.

The study of the doings of primitive races indicates that they had most active minds and that they were dumb only because they did not know anything, not because their minds were incapable of understanding facts if they had found them. We are smarter today only in so far as we have busied ourselves in searching for truth. The moral to be drawn from this study therefore is obvious. In view of the development of the science of nutrition we are smart enough to know the silliness of taboos but the prohibition to use sense is even more closely guarded than the food we eat, or do not eat. We cannot eat mysticism, but we do still swallow it.

Mysticism and taboos are in themselves innocent as is shown by peoples who observe them for hundreds of years. We teach children the mysticism of Santa Claus. When they catch up with us they laugh at us and bide the day when they shall have their own children to spring it on. Mysticism also, it seems in the light of

today, is a joke once the individual grows up intellectually. Certainly this is true of the taboos considered in the light of the science of dietetics and digestion.

Mysticism in the day of intellectual darkness did no harm, possibly it did serve some good purpose. It is different when mysticism is mixed up with intelligence, when it inherits the achievements of the scientist. For instance when mysticism inherits the gas engine and explosives and develops it into agents of destruction and is guided by the mysticism of the jawbone of the ass out of which flows water. Even the radio, the most amazing invention of man, is ready to transmit grand strains of the pipeorgan, the voices of artists, or the noble thoughts of intelligent women and men. It is not the fault of the physicist that it is available for the use of mysticism in broadcasting events that never happened. Certainly mysticism has served its day.

O ye delicious fables! where the wave
And woods were peopled, and the air, with things
So lovely! Why, ah! why has science grave
Scattered afar your sweet imaginings?

—*Barry Cornwall.*

CHAPTER III

DAWN OF THE STILL SMALL VOICE OF CONSCIENCE

The preceding chapter dealt with the mythology of several primitive peoples. We were confronted with the fact that basically the mythologies were much the same. Was there something in the human mind which found a like expression in various tribes or did it arise at one central point and spread as tribes spread? It would be pleasing if we could believe that there was something extraneous which whispered to the various tribes that there was something beyond them but evidence indicates that mythology developed among a primitive people and in course of time it spread as tribes spread. We are still at a loss as to why mythology developed anywhere. It was not a matter of reasoning for they had no facts to reason with, it was not a matter of belief because they could not formulate anything to believe.

Our forebears did not do these things because they were dumb. They had keen minds and certainly some imagination, but they knew nothing except what they could see. It is only natural that they generally fixed on the sun and moon as the most likely superior powers of creation, because those were the constant and most conspicuous objects.

Moses used his mysticism to organize a belief. His story of Creation was an amazing achievement. It answered the purpose in an admirable way for a semi-savage people. That it was not something peculiar to himself is shown in that there were seven theories of Creation. Of the seven theories of Creation, why the two worst were selected for presentation in Genesis puzzles us. It is interesting to speculate on what would have been the result had he selected one of the remaining five. For instance the one which as-

sumed that the God of Creation was a woman, who gave birth to descendents without sex and without hate. We would have started on a nobler plane than we have achieved to date.

I

It is our purpose here to see what we can find within man himself which excites in him a desire to do better, something outside of mysticism, to explain the achievements of civilization. Beyond mythology we must seek a new concept based on fact.

Suppose someone from another planet landed here and tried to figure us out. The first thing that would attract his attention would be our homes. The young wife, the baby, and the admiring papa. Both struggling to make a home for that baby. Then a life of turmoil with its joys and sorrows, with the church and politics, finally the children grown up and gone, to start the same routine all over again. Then old age, fight all gone, viewing the setting sun, tranquil again, babies only a memory. Then he would read our textbook, the Bible, read about concubines, and mass murder dictated by our Yahweh, then read "We lie beside the still waters, we shall not want." He would conclude we are a peculiar people and I agree with him. The Twenty-third Psalm is a precious document for the aged but it would be of little help to our visitor to explain the battle of life as we wage it. He would be at a total loss for an explanation of our civilization as it is at its best to date.

We need to pursue a new line of investigation. All evidence supports the hypothesis that the achievements of mankind have come from within man himself. We have been taught that all power for good comes from without. The source of that alleged power is based on assumption. This extraneous power has exerted itself in the suppression of what man has achieved from working within himself.

The Egyptians in their early history seem to provide the most promising material for our study. Here we first find facts available to guide us for future discussion. What it is that causes us to try to do the things we do; why is it we want to fix things up nice for the wife and baby? It is something that definitely exists though we cannot explain its source. We just give it a name and attempt to define it after we have completed our study. It is a still small voice that whispers with a various language to each human being. We find the abstract thing which we call conscience which of course is a word for which we must find a meaning, or perhaps better said we have a working outline which we must understand for which we must find a word. It is like electricity, we can see what it does, can even make it do things for us, but where it comes from, how far it reaches, will be forever beyond our ken. Electricity is a silly word for such a vast power. It is the Greek word for amber. It was discovered that if one rubs a certain kind of comb on a cat's back it manifests peculiar properties. It is a good word because it presages nothing. Both conscience and electricity are just a part of the universe.

All noble achievement of mankind has been the product of something rubbing a certain individual a certain way. We may believe, or at least feel, that the urge to achieve comes from a higher source. We assume it is from a higher source but what we mean is that it is beyond us, it may be up, down or sideways. This urge we say is our conscience. The definition of the word *conscience* has never been given due consideration in our attempts to make out what the motivating force in the human race may be. Too often it has been regarded as synonymous with belief or even with something subservient to authority. The result is we have attempted to advance by following authority but conscience knows no authority, it is beyond out-

side interference, it is a bridge between each individual and his destiny. It knows no authority encased in revelation, it can only reveal itself to those who attune themselves to receive its voice.

Conscience, says the dictionary, "is a sense of a desire to do, to please, internal recognition of right and wrong, as regards one's actions and motives, the faculty which decides on the moral quality of one's actions, therefore an inward sensibility or awareness of something, sensibility of wrong done." However we must warn that morals and conscience are not synonymous. Better said: conscience is at once a desire and a sense of our capacity to do something better. This has never been so emphatically demonstrated as it is today. But to secure a collective view seems impossible because as Lecky notes "There is a disposition in some moralists to resent, as an imputation against their own character, any charge of immoral consequences that may be brought by the principles they advocate." That is to say, what you yourself do is moral, what the other party does is immoral. This I understand is bridge table philosophy and assures a full attendance.

My definition of conscience for the purpose of this chapter may be stated something like the following: it is that something in us, of unknown origin, which makes us want to make it nice for mama and the baby; to achieve all we can in our lifework to assure their freedom from want as long as they live; to do what we can to further the brotherhood of man; and finally when we have achieved our best, to hear the grandchildren point to us and pridefully say "He's my Grandpa." I present this definition in this way to show why those who have never had a baby of their own can never understand the independence of conscience; as something that can only be felt; something which can never be obedient to any authority.

Morals is equally difficult to define. This is apparent

when we note that the dictionary says of morals—"pertaining to or concerned with right conduct, distinction between right and wrong; concerned with the principles and rules of right conduct, ethical. It is an affair between individuals usually in relation to society." Therefore what is moral depends on the collective view of a number of individuals. Its highest fruition is the Golden Rule. Do unto others what we would want them to do to us. That is the expression reaching out to the brotherhood of man. The Golden Rule is said to be the product of the collective effort to do what was best for everyone. We would like to say it was the product of the highest efforts of conscience but might have been a conclusion reached by a race of individuals of equal fistic ability. This is suggested because the Golden Rule was developed in China, for to us all members of that race look alike. What would have been more natural than to reach the conclusion that I had better do to him what I would want him to do to me for if I do otherwise we get the reverse statement of the Golden Rule, expressed by some: "Do not do to others what you do not want them to do to us." This is the expression of cowardice; do not do what you have in mind to the other party for it might turn out that he is bigger than you and do more to you than you are able to do to him. It is the basis on which we do business. This is in contrast to conscience which tells a man to do the right thing because it is right even though one knows he will be slapped in the face for his efforts. Thus experience may confirm the dictates of conscience.

Morals may be dictated by conscience but morals are only for a generation and change as we advance. What was such in one generation is not so in the next generation which is obvious when we note that our idea of morals change as we drift from peacetime to war.

This has never been so emphatically demonstrated as it is today.

We must also consider *ethics* of which the dictionary says "it is the science of morals or right conduct." Because the definition of conscience is so often regarded as synonymous with morals and since the idea of morals are so shifting there can really be no science of them. Judging from what one reads in the books I conclude that ethics is the nicest things you can say about moral conduct, the interpretation of the nicest people that is to say. It is they who distinguish between what is moral and what immoral on a certain date.

We have still another word which we may place midway between conscience and morals. It is *character*. We may say it is the blue-print to give us a working plan in the carrying out of the dictates of conscience. Character is permanent and differs from morals in that it does not shift from time to time. When we say a man has character we mean he will follow the dictates of his conscience. A man's character is what he builds out of himself. W. A. White speaking of life says "It is what you think it is, which means that life is organized memories. And the kind of organization one gives memories makes his personal equation in his individual character."

The use of these three terms shows that there is no unanimity of opinion as to their meaning. To illustrate what confusion exists even in high places I wish to quote Cardinal Gibbons, one of the ablest and most respected prelates this country has produced. It is from an essay published in 1909.

"... Many Protestants say, 'we obey our conscience, you obey the Pope.' Yes; we obey the Pope, for our conscience tells us that we ought to obey the spiritual authority of the Pope in everything except what is sinful. 'But,' they reply, 'we do not believe that any human power should come between the human con-

science and duty.' Neither do we; but while you believe in private judgment, we believe in a religion of authority which our conscience tells us is our lawful guide and teacher in its own sphere. You say that you believe in religious freedom. Do you, however, interpret this freedom to apply only to yourselves; or are you willing to concede that to others likewise is to be left the freedom to follow their conscience?"

With all respect to the distinguished prelate it is obvious that what he calls conscience is really belief, a belief that the Church is capable of and has the right to lay down the laws by which he is to be guided, without question. In the intensity of that belief, rests the security of the Church. It tells the still small voice of conscience to shut up and listen to the word of authority. However rules laid down by others have nothing to do with one's individual conscience. That his character asserts itself in that he makes or reserves the right of independent action. He believes that he should follow the Pope except "in what is sinful." If his Holiness suggests something sinful he just is not going to do it. The Cardinal's whole life contradicts this view. It was an expression of this independence and he demonstrated that the dictates of his conscience were nobler than the teachings of his church. The nobility of his character just stuck out all over.

I was puzzled at the attitude of this distinguished prelate. I find the key to it in a book published long after his death. The title of the book is Catholic Moral Teaching and Its Antagonists. The greater part of the book is made up of shadow boxing with these imaginary antagonists. It is as though the American Medical Association called a meeting to oppose the chiropraths. Build big and opponents grow correspondingly small by simply regarding them with tolerant sympathy. Many "antagonists" to the regular profession

have sprung up but in time they disappeared, eclipsed by the advance of medical science.

I quote the following from Mausbach's book: "Many representatives of modern ethics describe Christian morals in general as a heteronomous system of compulsion and fear, since the law underlying it has its source not in man himself, but in God . . . For a Catholic 'God's will and law are not written upon his heart and conscience,' they are something external to himself, imposed upon him in the commandments and the authority of the Church. The conscience of Roman Catholics is the Pope."

The Church's idea of morals is something imposed from without. This means that the growth of character is limited by the church. The surest thing we know is that the advance of the human race has come about through the working of something within himself which spurs to greater achievement.

The Church's words are sad words. The urge to do things, to follow the dictates of the best there is in him is suppressed by authority. This condemns mankind to remain at the level of the past. In compelling subservience to its dictates the Church assumes responsibility for the disaster that has overwhelmed the whole globe. That seems a fair diagnosis but when we try to formulate a remedy we are overwhelmed with despair.

The Church says God dictates its laws. However if one traces the development of the laws which govern the Church we discover that they were agreed upon in convention assembled. This is the technic of Moses who said God said so.

II

Whether we obey a law or not depends. We kicked the prohibition law, itself a manifestation of postwar hysteria, in the face and made merry because but few favored it, when thirsty, and it had disastrous results.

Will Rogers waxed facetious by saying: "Our legislators vote for prohibition as long as they can stagger to the polls." If we do not like a law we ignore it, in private. On the other hand we pay our income taxes because Uncle Sam carries the big stick. Conscience does not approve because it is in such a large measure predatory, it violates the dictates of conscience, because we must bow to authority even though our conscience tells us we should not waste our substance on the indolent so that they will cast their vote for those who do things which violate our sense of right; take things we had provided for the wife and baby. This is a perversion of the Golden Rule. It says "I am doing this to you because you can't help yourself and I know you can't do the same to me." To ignore this dictum may not be unmoral but it surely is illegal. I mention these things just to make clear what is to follow.

What I am attempting to show is that individual conscience, not authority, is the faculty on which civilization must build. This seems a fair conclusion because all the advancement that has been made has been the product of an individual or a number of individuals working to the same end. We prate about democracy but we have it not, we talk about religious liberty but we have not yet tried it. All the election we now have is to select the cow lot in which we shall live, and even so we are branded and put into the lot selected for us while we are still calves.

That is to say in contradistinction to conscience, which comes from within, religion and politics are extraneous in origin. Religion has come to us through revelation. We are not to inquire as to who revealed what, on penalty of eternal damnation. We get our politics where we get our skins: we are born with them on. Study the conventions of both churchmen and politicians and one searches in vain for any reference to either morals or character. What is best for the

organization is the only concern. The doings of politicians may be an insult to the conscience of the individual as they were in the Chicago convention to General Leonard Wood. His conscience and the moral sense of the convention would not mix. There is one instance where a man preferred to follow his conscience rather than be President. He refused to appoint Fall and Daugherty to his cabinet.

If we assume the liberty of trying to follow conscience through both the church and politics we must realize that the Christian church in days gone by has shown that it is capable of ignoring not only conscience but everything even that is religious or even moral. However it is difficult to keep the term *religion* distinct from the teaching of the church. It seems a perversion of a noble sentiment to apply the term to things that are selfish, of benefit only to the group who impose it. We do not speak of the religion of politics because the only hell the politician recognizes is defeat at the poles. It is possible to make of politics a religion as Gladstone did, to mention only one person.

The word *religion* should imply something which we can revere and worship, something to which we can apply our energies for a lifetime. Many persons, perhaps most, subject themselves to the authority of the church and, or but, make a religion of it, but to do so is purely elective. Conscience is not subservient to the church but is above it.

In the foregoing I have attempted to make clear what I conceive to constitute conscience, its difference from morals and obedience. I propose to pursue this primary concept, as far as it is possible to do so by the evidence at hand, as distinctive from belief or authority. We must trace its origin, how it has acted in times past, and how it acts today, and how it may guide us in the future.

III

With these preliminary remarks we start our search for evidence of the birth of conscience. By evidence I mean something that is demonstrable, something of which we have proof that it really happened, something the antithesis of revelation, which is in the last analysis only ecclesiastical gossip over the Alley fence. We must start with the discussion of conscience as exemplified in its highest form. It is found in the relation of mother and child, in the state of love and responsibility for the child, normal family relations in the highest forms. We see it preserved in the hieroglyphics of the Egyptian tombs. Here for the first time in history we can build on recorded facts. We do not need to ask who said what. We have but to listen to those who have learned to read the inscription of these ancient records. In these studies we owe much to the archeologist, particularly to the lifelong researches of James Breasted. It was by literally digging facts out of the ground that he and other investigators have learned so much of the stages of the development of what we call conscience. The Egyptians recorded the course of their development of it in their tombs. They did not take their secrets to their graves but hammered them into the wall with chisels. That is the best evidence that they believed that what they did was all right. That in itself brands it as an expression of conscience.

Let us repeat, the first evidence of something working from within is the relation of the mother and child which are depicted in their tombs. Here a higher type of life is first recorded—we may even regard this as the birth of the Jesus concept.

Since we do not know why they did it we must learn as much as we can of what they did. Archeological researches reveal that the Egyptians had possessed a standard of just plain morals far superior to

the decalogue three millenniums before it was alleged to have been written; let that be emphasized. This higher development was notable in the Nile territory before the beginning of Hebrew literature.

To quote Breasted: "It is now quite evident that ripe social and moral development of mankind in the Nile Valley, which is three thousand years older than that of the Hebrews, contributed essentially to the formation of the Hebrew literature which we call the Old Testament. Our moral heritage therefore derives from a wider *human* past enormously older than the Hebrews, and it came to us rather *through* the Hebrews than *from* them. The rise of man to social idealism took place a long time before the traditional theologians age of revelation began. It was the result of the social experience of *man himself* and was not projected into the world from outside."

That the Egyptians discovered conscience in line of love of offspring is evident from the first recorded cases of the word 2,700 B. C. which was as follows: "Precious to a man is the virtue of his son, and good character is a thing remembered." Breasted says: "Civilization is built on character, and the foundations are therefore still so new that we feel no discouragement if the building has not yet exhibited the stability we may yet hope to see it achieve."

It seems the earliest development of man is bound up with the material welfare of the people. Everything grew so luxuriantly along the Nile that they had time to play with the babies. Everybody liked everybody else. So they built vast tombs for their departed rulers and marked on the wall how kindly they felt toward them. Through the records in the Pyramids we learn the Egyptians became aware of a salutary atmosphere. Righteousness and peace dominated their world. It seems to have been spontaneous, they just had not yet learned to sin and hate, hence there was nothing to

fight about. The fact generally overlooked is that it takes as much practice to learn to sin as it does to learn to play the piano. Of course there are in both classes infant prodigies. However, there is no evidence that it is really congenital. Sin really is sales talk for those who want to sell hell, in order to frighten people as Buckle notes the Scotch clergy did a century or two ago.

The test of the character of the individual with the Egyptians was measured by a man's relation to his family—father, mother, brothers and sisters. The greatest virtue is to be found in filial piety, they thought. The massive tombs in the cemeteries were erected by the son for the departed father. In one tomb is found the following: "Now I caused that I should be buried in the same tomb with this Zau (his father), in order that I might be with him in the same place; not, however because I was not in a position to make a second tomb; but I did this in order that I might see this Zau every day, in order that I might be with him in the same place." Life for them was just a family affair it seems. This regard for the aged implies a vision of a future existence in which the son could share the life with the father. A more lofty concept than this no one has yet attained.

We have here the whole basis for the creation of a civilization. As one studies these accounts one wonders if Moses did not get his ideas of the Fatherhood of God from the Egyptians. From the Fatherhood of father to the Fatherhood of God was but a step. It was just making a common father. Unfortunately the father of Moses was the product of mythology, real fathers are our heritage as it was with the Egyptians.

The prophets of Egypt proclaimed the Golden Age of social justice to which we have not yet achieved. If the inspired writers of the Old Testament got their teachings from the Egyptians they certainly mused

them up. Many years later we find the baby reappearing. Tennyson looking down into the cradle of his first-born exclaimed "Out of the deeps, my child." "Tennyson saw" says Breasted "what otherwise the human soul has never given expression to except possibly in music." Tennyson's voice was the voice of conscience as he saw it in Egyptian lands. The baby said something to him. The baby and music stir in us the noblest sentiments of which the human is capable. That was his idea.

The Egyptian is shown in the pictures in the tombs accompanied by his wife and children. Let it be repeated right in these pictures is proof that there the Jesus idea was born, not millenniums later in the land of Galilee. These scenes of family amity form the very basis of our knowledge of the development of conscience. Leastwise we know that conscience was born in the mother's arms as she held the baby. This is history, not revelation. Breasted quotes from McDougall: "From this emotion (parental tenderness) and its impulse to cherish and protect, spring generosity, gratitude, love, pity, true benevolence and altruistic conduct of any kind; in it they have their main and absolutely essential root, without which they would not be." This author also notes that any wrong toward the child, the object of parental tenderness, produces anger and resentment. To quote McDougall again: "This intimate alliance between emotion and anger is of great importance for the social life of a man, and the right understanding of it is the fundamental for a true theory of the moral sentiments; for the anger evoked in this way is the germ of all moral indignation, and on moral indignation justice and the greater part of public law are in the main founded. Thus, paradoxical as it may seem, beneficence and punishment alike have their firmest and most essential root in the parental instinct." Westermarck's observations

convey the same idea: "Innumerable facts might be quoted to prove that parental affection is not a late product of civilization but a normal feature of the savage mind as it is known to us." We should note particularly that such anger was a reaction produced for protection of wife and baby. There was neither hate nor conquest back of it.

The result of the family intimacy was that the Egyptians were very solicitous of their moral conduct. To quote Breasted: "A monarch (baron of the 27th century B.C.) left the following record of his upright life: 'I gave bread to all the hungry of the Creastes mountain (his domain); I clothed him who was naked therein. I filled its shores with large cattle and its lowlands with small cattle. I satisfied the wolves of the mountain and the fowl of the sky with flesh of small cattle. I never oppressed any one in possession of his property so that he complained of me because of it to the god of my city; but I spake and told that which was good. Never was there one fearing because of one stronger than he, so that he complained because of it to the god—I was a benefactor to my domain, in the folds of the cattle, in the settlements of the fowlers. I speak no lie, for I was one beloved of his father, praised by his mother, excellent in character to his brothers, and amiable to his sisters.'" In fact he takes in about everybody except his -in-laws.

Furthermore the Egyptians developed a sense of existence beyond the grave. Their God was Re, the Sun-god. The idea of a parent god was developed on the basic idea of affection for the male parent. The central idea seemed to be that one might achieve eternal reward by honest labor in behalf of the family. It was not backed up by any argument so likely he just felt it. To say that we just feel it without knowing why is better than giving explanations based on ignorance.

As an adjunct to the family relations good conduct in office was admonished, as was courteous relations toward one's fellows emphasized. Modesty toward those underneath us, to listen to the supposedly more ignorant were recognized virtues. The virtue of worldly achievement was worthy of note but they must not be allowed to disturb family relationship.

Righteousness is everywhere extolled. "Although misfortune carry away wealth—the power of righteousness is that it endures." And "Established is the man whose standard is righteousness, who walketh according to its way."

Everywhere is the admonition to treat kindly those about us, to be righteous, to be truthful. The whole scheme of life declared that by one's own efforts does one achieve a happy end. The entire history of these people six thousand years ago shows they achieved a civilization by their own efforts. Noble sentiments were developed within themselves within the individual where all noble sentiments have been developed since the beginning of time. Through conscience to character to morals, is the road they traveled to reach a satisfactory state. Perhaps with a new start we shall be able to emulate the achievements of the Egyptians.

It was not only in the mundane achievements that the Egyptians reached a new height. One of the wise men of this period, Ptahhotep, came so near to monotheism that Breasted feels warranted in using the Capital G. We find in the teachings of this man statements which anticipate not only the story of Creation, as the Old Testament relates it, but the anticipated birth of Jesus. This is of particular interest since it took place many centuries before Moses.

The Egyptian tombs furnish many interesting items. One king, 2110 B.C. had a harp player's song and had the figure of a harp engraved in his tomb. One might get the idea that he had taken his harp with him but

the last stanza of the song seems to deny transportation of the celestial instrument:

“Celebrate the glad day,

Be not weary therein.

Lo, no man taketh his goods with him.

Yes, none returneth again that is gone thither.”

Here again the “thither” is not specific. They just felt there must be such.

Despite the poem quoted the Egyptians struggled with the idea of a future existence as is given expression in their remarkable preservation of the human body. They got the idea of a difference between the visible body and the invisible human intelligence. They buried utensils with the body, likely to be useful in their journey beyond. But to say they were convinced of immortality of the soul would be going beyond the evidence. They merely recognized that death did not explain all to their satisfaction. They were merely trying to penetrate the impenetrable, just as we are today.

They seemed to have the idea that the body rises up some day. Today there seems to be a lack of unanimity of opinion if the soul proceeds at once to heaven or if it will rest in the grave and all souls ascend at once on the Judgment Day, or even if it stops for a time at some half way station to await the issuance of a new ticket.

Gardiner has rescued the following from some Egyptian inscriptions: “Well beasted are men, the flocks of God; for he made heaven and earth according to their desire, he quenched the thirst for water, he made the air that their nostrils might live. They are his likenesses which came forth from his limbs. He rises in the sky according to their desire, he made for them plants and animals, fowl and fish, to nourish them. He slew his enemies, he chastized his children, because of their plots in making rebellion. He made

the light according to their desire, that he might sail the sky to see them. He raised a protection around them; when they weep he heareth. He made for the rulers in the egg (rulers predestined before birth) to support the back of the feeble."

IV

It is too bad the Egyptians could not have ended their speculations there. After they sought to work things out on a concrete basis they became all mixed up in a variety of opinions—and forgot to look at the stars. The intensity of their disputes as to just how one gets to heaven never led to murder however. Nowhere in Egyptology is there talk of killing. We read that Moses slew an Egyptian; obviously the Egyptian being on the receiving end did not think of it first. But they did get interested in wine and women—it is to their credit to say they did not try to sing, just wrote poetry. We are told that then their moral development lagged. We infer from this that they became interested in ladies other than mama and daughter. Even the Egyptian conscience was not fool proof. We have seen the rise and fall of the Egyptian conscience as it developed in the home.

With such a fine start it is a problem as to why they did not maintain that level. Wine and women are not a cause of degeneration but a symptom. It is not recorded that either wine or women ever chased a moral man down the alley. Nor has any man got far with either on a thin dime. We see proof of it in that as the wealth of the Egyptians increased the influence of the family circle lessened. This has been true to date, and still lacks an explanation.

Some gained more wealth than others and there came a discovery that there was a difference. They began to push each other around. Gradually they discovered the power of organization. They left one in-

scription indicating the shearing of a lamb, a technic which was developed so highly by stock-brokers during the depression some years ago. "Civil war pays no taxes. What is a treasury without its revenues." They knew wars were not profitable as such. Wars do not pay taxes; it is the people who pay.

The inevitable result was when they gained riches, character declined and with this disasters followed. Same old story, poverty, not riches develop character. It is easier to be good when we do not have the implements to do otherwise. A distinguished New York clergyman, when asked by a young man from the country if it would be possible to live a moral virtuous life in the big city on fifteen dollars a week, replied "That is the only life he can live on such a salary." This would indicate that it is a good thing that most couples are poor when they are having their babies.

V

The Egyptians when they abandoned the dictates of conscience and sought the more abundant life discovered that abundance is a relative thing, and like a bank account, needs to be replenished. Gibbon in his *Decline and Fall of the Roman Empire*, told at great length what happened to one such organization which overlooked this fundamental fact—the Romans. He did not consider that history may repeat itself. It was just too bad, was his conclusion. It remained for Haskell in his book *The New Deal in Old Rome* to point out this painful fact. Haskell makes it plain that all snow houses will melt in the springtime, even allows one to wonder if our own handiwork will be an exception.

We may see what we can salvage out of the Early Egyptian civilization. When we try to trace the influence of the Egyptian way of life further and evaluate its influences on our present problems we are beset

with many difficulties. It represents a social evolution existing for more than a thousand years. It was the first advancement on earth, extending from the earliest existence to social idealism, expressing the fact that the human is capable of developing it within himself, producing a profound moral vision coming through conscience to character, let it be repeated. All this occurred long before the settlement of the Hebrews in Palestine. We have seen the steps from the dawn of conscience to the age of character to a high plane of moral behaviour. Here the Hebrews took over and we must take a look in a later chapter at what they did with the foundation the Egyptians builded.

A couple of thousand years after this noble experiment of the Egyptians to produce a civilization guided by conscience some Hebrews got themselves a big drum and moved onto the stage and boldly declared that "We will build you a Yahweh and show you that playing with the baby and mama gets one nowhere. Park the females where they belong and get rough," or words to that general effect.

It staggers imagination to picture what would be our status today had we followed the Egyptian way of life, as set forth in the quotation from Breasted, the truth of which is perfectly obvious. Had we done so we would be far in advance of what we are today. It seems incredible that the Hebrew mythology should have been accepted in the first place, that we still adhere to the revelation centuries after every statement has been disproved. We are still far back of starting from nothing; we have traveled in the wrong direction. We are compelled to ask, did not the Dark Ages begin here?

In tracing the evolution of conscience in its effort to achieve a higher state the early thinkers offer great interest. Countless persons dead or living have con-

tributed most of what we now have that is ennobling. Conscience was not the exclusive property of the Egyptians. It will be worth while to study conscience as it was shown since and is showing now.

VI

In the study of the nobler minds of the past we may begin with Thales who was the first to inquire into the natural causes of things, the first effort to break through the curtain of mythology. He was the first to ask who said what? Herodotus came very close to stating the principles of evolution as we know it today. Aeschylus pictured the evolution of society, in poetry at that, in a way that we have not yet appreciated. Thucydides observed everything would continue to be as it is as long as men are as they are. Growth depends on man, he thought and as history has proved. Plato observed that improvement would follow only from conscious effort to improve. Seneca observed "The day will yet come when posterity will be amazed that we remain ignorant of things that will seem to them plain." Marcus Aurelius, one of the most remarkable of the ancients, presents many observations which today may be read with profit when we seek the basis of the development of character.

Despite revelation even the prophets got the idea of progress in the Messianic hope expressed in Amos, Hosea, Isaiah, Micah, and Jeremiah. They were inspired. They envisioned a more elevated state of society. They thought they had everything all figured out and that there was nothing beyond, and pulled down the curtain and adjourned *sine die*.

A long time later Thomas Aquinas lifted the curtain. He was diplomatic in suggesting that one might progress even though he accepted revelation. Nobody was

shrewd enough to see that this was really the proposal to deny the finality of revelation.

Roger Bacon, a Franciscan friar, introduced the idea of scientific research through experimental methods. Any friar who should suggest that the revelations could be amended deserved to fry. Those are fighting words in any back alley. Instead, in order to give him leisure to figure out his amendments he was imprisoned for a long time.

If often happens in the affairs of men that when we take in too much territory, try to corner the market, we receive a setback. The Crusades belong to this category. It was a religious movement that looked all right but in visiting other countries they found peoples who were doing very well for themselves. Most people got more ideas which were harder to suppress. This progressed into the period known as the Renaissance. Inge says "The Renaissance was a conscious recovery from the longest and dreariest setback that humanity has ever experienced within the historical period—a veritable glacial age of the spirit." Unfortunately though having access to inside sources of information he does not come to Bacon's rescue and tell what made the Dark Ages dark. We know just as much as Bacon did. Incredible, he thought; so do we.

VII

Conscience as we have seen is the product of some urge within. Suppression of it came from without. When the church came to dominate the affairs it prescribed what was to be believed. The mess of Mosaic mythology was abandoned by the church in making its prescribed beliefs. These were formulated in convention assembled. Conscience was confused with subservience to authority as we have seen. The power of the church made it possible for it to suppress what did

not conform. Since conscience is a matter of the individual, only individuals needed to be suppressed.

The difficulties of the church came from two main sources. The printing press was discovered and individuals got ideas that could not be suppressed by destroying the individual.

After the printing press was invented it was discovered that the goose quill was mightier than the stake. Writing each for himself, for instance Servetus, was bad enough but when the printing presses got going the writing was not writing for himself but to a wide audience, even for posterity. That the printing press threatened the power of ignorance was early recognized. Contemplating this new invention Cardinal Wolsey exclaimed: "If we do not destroy this dangerous invention it will one day destroy us." 'One day'—well said—it will expose ignorance. Who would have thought 'One day' could be so long deferred?

But men did write and the presses printed. Mere mention of only a few of those who worked with their pens is possible. The last burning at the stake was of an individual who had the temerity to translate the New Testament and had it printed so the common people could know the truth. One of the first to wield a pen was Rabelais who was a French monk, that is he was until he monkeyed with the established order and then he ceased to be one, that is one less monk. He wanted to know if there was anything higher than the code that surrounded him. That is to say there was something nobler working in his own private conscience than was working in his environment. Bodin was just an ordinary being and therefore he could not be demoted. It is not possible to unmonk a monk when he is not a monk. He believed God and nature were fixed points and any change in the status of the human race had to be brought about by the

efforts of individuals, that is to say advance is possible only by increasing knowledge. Bruno, sad to relate, tried to be a monk and follow truth at the same time. Because of this bright concept he went up in smoke. A monk should not question the established order. Descartes went all out for reason and scientific search. Saint-Pierre had the idea that social evils were due to ignorance and prejudice and only by eliminating them could we progress toward human happiness. Turgot believed one could see the light by studying history, that is checking up on the causes of cussedness. Voltaire went further and named names. He thought, and said, that wars and religions were the chief causes of our troubles because both were based on hate. To quote his words: "It is doubtless a melancholy consideration, that the Christian church has always been torn by dissensions, that so much blood should have been shed by hands, destined to carry the symbols of the god of peace. This furious zeal was unknown to paganism." Rousseau thought war and religion were synonymous with civilization and the more we got of both the worse off we would be. Condorcet was the worst of the lot. He thought that what Rousseau thought was civilization was just an unfortunate mess which a conspiracy between the clergy and the rulers got us into. That man did not see anything; what if he were alive today—he would see his judgment confirmed. He was hopeful that a study of the laws of nature might get us out of it. One wonders if his hope could survive the mess we are now in.

An Englishman of that day realized it is not possible for one small part of the human race to advance in defiance of the laws governing the common good of all mankind. Hume was his name. He cautiously inquired if civilization was progressing and comparing it with the ancients he was hopeful. Hume was a

real problem. He believed folks could be decent if they individually wanted to be so, that is to say if they just obeyed their conscience. That branded him as an infidel. He was distressingly good, reflected so well the ability of the soul to be great of its own power, and so was branded a great infidel. So outstanding was the worth of the man that when he died he was the good infidel as well as a great one.

Adam Smith too in his great work, the *Wealth of Nations* noted the importance of economic advancement in the progress of civilization. He gave hope that the individual could do something on his own account. He was conscientious in his expressions.

Malthus thought there might eventually be too many of us, if not now. He summed up the whole thing in a sentence; "Nature has planted in man a sex instinct so powerful that it will, if left to itself, cause starvation, vice or death because of the great numbers of human beings, this being due to the fact that food resources do not increase at a parallel rate with population." This was a new note, reproduction is not the noblest achievement of man, that conscience tells one he can feed only so many. He did not realize the advance in science that would some day come in and play such a large part in the nutrition of the race. He did not envisage power machinery in the production of things to eat. One can further the production of about everything except intelligence and character and it even saves time to be devoted to those achievements. Thus science has in a measure offset the impending disaster he visioned. Then somehow mammas got ideas of their own.

If Malthus had known that some day doctors would eliminate infectious disease he would have died of heart block. If the kiddies did not die, the world would be over populated in a much shorter time. He

would be surprised if he could see the advancement in agriculture, and know that it took the efforts of a great mind to keep us from producing too much food.

The power of conscience made the most trouble for the church by asserting itself in new discoveries. These jarred the very foundations by disproving everything the inspired minds revealed. The truth has gradually got under the skins of the clergy. They are running around in circles as discussed elsewhere. One almost is persuaded to believe that some of them believed their teachings. In a book just off the press the author just can't understand why war came. Everybody prayed for peace, including the highest dignitaries of the church, *but war came*. That sure is a poser. The easy decline from the sublime to the ridiculous is shown by the following story: A Chinaman had a truck patch on a small island along the Pacific coast. An officer said to him "John, you must give up this island, we're going to build a lighthouse on it." The Chinaman was much agitated and replied "Lighthouse, he no good. Lighthouse at Flisco—the whistle he blow, the bell he ling, dam flog, he come anyhow." John missed the point as do most of us today, that a warning of danger is something different from the removal of that danger.

VIII

Let us now look at the action of conscience in practical life. The tragic fact today is that the noblest characters guided by conscience are subject to authority. Conscience and character can become a democracy only when there is mass action. Inasmuch as conscience and character are individual, mass action is difficult and is possible only when they come out of their normal isolated abode and by acting in unison can they assume authority. Otherwise persons comprising authority usually see to it that there is no mass

action by teaching various groups to act as individuals.

Authority is man-made for a selfish end. It will require eons of time before this simple fact is realized. We cannot figure the time when we shall arrive at a democratic state, because we have not yet started. One man made himself quite a reputation as a philosopher by simply stating "I think, therefore I am." Unhappily the converse is not true. Those who do not think do not because someone has taught them to believe that they must not.

Scientists are united in a democracy which seeks only the truth. United among themselves they are an important part in the world of controlled action, as we see the politicians need doctors in the army.

Science seeks only to understand the laws which govern us. Only by doing so do we become a democracy. There are universal laws which govern us, laws which taken together assure the intellectual independence of an individual. Only in the right to study truth are we created equal but our capacity to do so of course is unequal. This democracy of science offers brotherhood only to people who want to be free. Yet after all science may in the end achieve a general control of the antisocial members of the human race, as it has of disease. All that is necessary is to find the fount of human cussedness and pour some spiritual creosote on it. The disease-breeding pool we know full well. It is the following after things that destroy, things that are not true and which we know are not true but they are so pleasant.

But scientists must not go too fast. We are all of one human procession. The hold of ecclesiastical monarchy on the less intellectual is as firm as ever, perhaps rightly so. Those who lack the vision necessary to form their own religion can at least believe, at least they can say they do. Not knowing what constitutes

belief, they are content and no one would take this comfort from them. The primitive minds, not capable of understanding the nature of belief, far removed from the comprehension of science, have something of value in their belief in mythology in their distressed moments. They die as dumb as they were born and their progeny follow the same pattern. For them possibly this state is the best but deliberately keeping people dumb or warping their minds to selfish ends carries terrible responsibilities. We are horrified just now at the acts of a nation which went all out for "Education for Death." But is not education for ignorance equally reprehensible? Truth only is immortal, ignorance a passing parade.

Just where conscience and character are today is the important question. They alone lack the power of expression. Neither of them talk words, they just manifest themselves in achievement. The individual is suppressed, initiative is crushed; never in the history of the nation has this been so obvious. Something slipped up on us.

All we know just now is that as in all wars, morals have gone to pot. Youthful crime is the despair of law enforcement officers; 'teen age girls, army doctors tell me, can show the boldest streetwalkers the fine points of the game. Parents have deserted their children. Their consciences deserted them and in turn they their children.

Before we recovered morally from the last war, a greater one was upon us. The great need is for better parents. Lack of sense of responsibility for the children's morals is at fault. Companionship of elders is what they need. A man who keeps his son at his side need not sit up nights wondering where he is. The same applies even more to girls.

With the suppression of conscience and character

our economic morals suffered: lack of honesty, greed is in the saddle. This, rather than a resurgence of cussedness, is responsible. The family head earns enough so that the children are relieved of toil. The desire for education for the children is the excuse for dallying. Dumb parents think that schools will make their progeny intelligent, as though dumbness were a crime. It may be a blessing if properly evaluated. The mischief comes because a child who does not learn to work before he is eighteen has small chance of ever learning. Too smart to work, too dumb to succeed without it. Then morals slump; being educated, the world owes him a living. For them there is only one honest opening—politics.

The schools do what they can to supplant what can really only be done by good parents. Supervised play kills ingenuity, leaves them empty when the play period is over. The play period of a child is measured by his waking hours.

The church loudly proclaims credit for the advance of civilization. The church educates for the church though theoretically it educates only for life after death. Life is only a secondary concern to the church. Such an attitude is possible only by the suppression of conscience.

Children do not care to think about death. There are a lot of things they want in the meantime. They hear a lot about sin but it is a lot of bother to find out how it is done though it sounds interesting. The real problem is the supervision of the child from diapers to orange blossoms. He is left largely to his own devices, said devices are technically known as the endocrine glands. Parents should educate their children for life, according to the dictates of their own consciences. The greatest of all sins is to teach the child that he was born sinful. Many people live from

the cradle to the grave without learning how to sin. That should be the goal of all parents for their children. Their conscience cries this out to them, if they have love for the child.

I figure it out for myself that nothing is of less importance to the world than the salvation of my soul. How I live, the spirit in which my task is done, is the affair of everyone with whom I have come in contact. The way I view the setting sun will be my own verdict of the result, and I shall know better than anyone how well I have succeeded in living within the range of the highest achievement of which I am, or was, capable. Conscience is the only guide to any individual. This may bring him to the stake, or build him a monument, to many it may bring both. Neither reflects the truth.

To achieve our best, be this great or small, is the important thing and the correct interpretation of this was never more important than it is today. It is only by driving oneself in work throughout a lifetime can one find his greatest joy. The idea that the less work the better is offensive to the dictates of conscience. We must realize that the day has 24 hours for some purpose besides giving the clocks a chance to exercise their wheels. Only conscience can tell each individual when his day's work is gone. The surest thing we know is that a tired body knows neither lust nor hate. Only the cry of the baby can wake him.

IX

Had civilization never departed from the fundamental Egyptian concept we could have found it easy to have grasped Pausanias' idea: "You must distinguish between earthly and heavenly love in the attraction of two souls on the other. The vulgar love of the body takes wings and flies when the bloom of youth is over. But noble love of the soul is perpetual.

Love is the hunger of the human soul for divine beauty, and to create it." Could we have started with this theory of Creation we would have had the Egyptian mother and her babe and the concept of Jesus and have escaped the whole phallic mess extending from the blood of circumcision clear through the history of religion down to the Holy Sacrament of our most refined Christian churches last Sunday. Had we done this we might have escaped the whole history of bloodshed and hate which now engulfs us. As it is we have spent five thousand years going backward. It was not the free action of conscience which dictated this course; on the contrary it was the suppression of it by authority.

Finally we have seen that the Egyptian working within his own conscience expressed, unconsciously, at least unformulated, a feeling that death did not end all. That is as far as anyone can go. Infinite bloodshed, called the Dark Ages, smoldering down to respectable denominational hate, down to simple bland doctrinal difference. In politics, life, liberty, the right to private property has become an iridescent dream gone cloudy. All that is left the individual is to listen to the dictates of his conscience in private and do what little he can for his fellowman. There he comes to the stone wall. What silenced the source of the still small voice of conscience he does not know. The disaster which has resulted from the organized suppression of it is now evident to all.

The noble concept of the Egyptian of the mother and child suffered complete eclipse. It is a long journey we must travel in order to find out what made the Dark Ages dark in the first place and what has kept them dark even to the present day. Five thousand years and we are further from Utopia than when we

started. But conscience is crying out for liberty in a new voice, the product of its deliberate suppression.

I have noted above that it is a deplorable situation when conscience can be commandeered by an organization, that by doing so advancement must cease. But after all it is a human organization. To say it is the will of God—perhaps it is but the voice is that of Moses and time may prove that it is not true.

We are confronted by just that sort of a possibility. Our soldier boys are scattered throughout the globe. They took their consciences with them. The best there is in man is awakened by tragedy. Why must they be doing that which they feel is not right, killing their fellow men against whom they have no hate?

They grew, bathed in the faith of their elders that prayer would prevent war. They were tricked by the promise that they would not be asked to fight on foreign soil. That such deception was necessary does not alter the fact that it was an insult to their intelligence. It is clearer to them than to us that prayer failed. What we should have been building was planes is evident to them and is penetrating even our stupid minds.

When these boys come back they are going to ask if we must repeat the stupid program. They may demand that a new order prevail. Conscience sharpened by the intelligence gained by experience may inspire unpleasant questions to ask the authorities who suppressed their conscience to remedy the faults they brought on us all.

This awakening of conscience is not limited even now to the boys who suffer and bleed. Hundreds of middle aged women come complaining of indefinite symptoms. We know the answer. For purposes of study we ask routinely if they have boys in the service. We have almost lost the courage to ask this question. It is like tearing a dried dressing from a sensitive wound. I have not the courage to write the answers.

Fathers suffer equally. I asked the above question of a father who came because of an imagined heart disease. He could not take a deep breath, his heart beat so hard. Did he have a son in the army, I asked? One boy killed in North Africa, another reported missing. He and mother did not dare to pray because they did not know if they wish he was dead or in a prison camp. And now he exclaimed in anguish that his last son just out of high school was taken away. That man really had an affliction of the great human heart, but his heart sized up as an anatomic organ was free from any demonstrable lesion.

The women furnish by far the largest contingent of grieving patients. They complain of almost anything. The pylorospasm caused by grief they interpret as gall stone colic. Their mother instinct causes them to suspect a pelvic tumor. Even though they have these lesions the removal of them will not relieve them of their troubles. They want their boys back.

Parents thus afflicted are overwhelmed with grief but they are becoming surcharged with anger at the teachings of their childhood, and their blind faith in which they have lived their lives. Their conscience is awakened as they visualize the day gone by when their child first excited their love.

Only one thing does history reveal to us; the need that free men be guided only by conscience. Wading in the very awfulness of the catastrophe brought on by the murky waters of oppression church and state have stepped off into the whirlpool of global disaster. Now they cry: Call the doctor, call the physicist and the chemist to make implements to protect us, while in the name of God we plan to continue to hug the same old delusions: religious freedom; democracy!

Will our returning boys grasp grappling hooks and try to rescue those who sent them away in the search for liberty, those politicians in the whirlpool of their

own making, or will the boys' liberated consciences restrain them and cause them to view the predicament of their oppressors as the final achievement of eternal justice? Time only can tell.

CHAPTER IV

BIOGRAPHY OF MOSES

Moses has exerted a greater influence on the civilized world during the past three millenniums than any other person and still exerts this influence. Why this is so is one of the most interesting studies that can engage the student today. To furnish a basis for such a study I have presented an outline of mythology in a preceding chapter. We find several striking facts. We find the general pattern of mythology retained. We find a continued repetition in the various characters of his time and we find it retained in the various religions of the world.

I

At the outset we may say Moses bears a particular interest to scientists because he convinced the world he had received his revelations direct from God, thereby fixing mythology and a personal God onto succeeding generations. The claims of revelation from God made it necessary for the followers of Moses to defend those beliefs against any scientific development which cast doubt on their truth. Disproving one thing Moses said God told him threatened the whole structure. Therefore, as scientists disproved his statements the followers of Moses said we were not fighting them but God, which placed all the responsibility on the scientists. So books were written about the conflict between science and the teachings of Hebrew mythology which later became organized into the church. And the conflict goes on, albeit in a gradually lessening tempo. Only as a matter of fact it never should have been listed as a conflict. There can be no conflict between mythology and truth. The so-called conflict is merely the attempt of mythology to survive in spite of the fact that its teachings have been disproved.

The time has come when our civilization is in such

a state that we simply must examine into the facts underlying Moses or the Moses' tradition, whichever it is. Has the God of Moses been a source of elevation to the human race or have events attributed to God by Moses blocked the advancement of civilization by silencing the voice of conscience as expressed in the voice of Jesus? The God of Moses simply will not mix with the needs of modern civilization.

Even yet Christianity is but an idea, Mosaicism is a reality, at least as figured in its influence on modern life. It is difficult to understand the genetic relation of the two. The gentle Jesus said: "I come not to destroy the law of Moses but to fulfill it." This is puzzling; one wonders if he really said it, leastwise we have difficulty in recognizing any law of Moses Jesus fulfilled. At any rate it is difficult to correlate this with the other statement: "Let the little children come unto me and forbid them not." The Jesus concept does not harmonize with the Mosaic technic in dealing with children. All of the evidence indicates that the Jesus concept was really born in Egypt in the conscience of man. It is now necessary to find out as much as we can about Moses. His burning bush still lights the world and verily it does not become consumed but burns as brightly today as in any other time in history. At least so the churchmen think, as they blow on the flame.

II

In the study of Moses we must attempt to get a picture of him in his historical setting. In this chapter we are dealing with his genesis; where did he come from? One of the most interesting features of early history is that if we are interested in any particular personage, by going back we find a similarity in other characters.

Throughout history when we study the biogenesis of an individual, we constantly compare him with others of his time. Searching for a parallel for the genesis

of Moses, we find an astonishing similar history in the life of Abraham. Therefore we look to the life of Abraham to give us some clue to the complicated genesis of Moses. In fact the accounts of the infants, Abraham and Moses, are so alike, so original and extraordinary, that one suspects that a maiden aunt wrote the biography of both of them.

There are a number of versions in the genesis of Abraham that have come down to us, but all are equally remarkable. Why this multiplicity of tales is of course suggestive that various hands had been engaged in establishing the original tale, all designed to prove that the subject of the sketch was quite a person. The one here presented is selected from Baring-Gould. It begins with the statement that King Nimrod, a son of Cush, and founder of the Babylonian Empire, was tipped off by the soothsayers that a rival was about to be born. Ampheli, wife of Terah, became pregnant at this time. She concealed her delicate state as long as possible. When gestation had proceeded to a stage where it could no longer be concealed the infant crept up under her teats so as to obliterate the abdominal enlargement. This is the first recorded case of a diaphragmatic hernia and the only one on record in which a pregnant uterus occupied the hernial sac. This makes us suspect that whoever made that observation was not well informed on the topographic anatomy of the diaphragm.

As the time of delivery approached the future mother of Abraham left the city and traveled until she found a cave which she entered. The next morning the child was born. Immediately the child's face shone as though the sun was casting its golden beams into the cave. The kid squalled, as newborn babies will, thus showing some human qualities. Hearing the cry God took compassion and sent his angel Gabriel to quiet the baby. He accomplished this by allowing the infant

to suck his finger. Another version seems more likely. Little Abe sucked his own thumbs getting from one milk, the other honey. Whatever the source of the nourishment, it must have contained all the necessary vitamins for little Abe grew rapidly.

Obviously so for when he was ten days old, in the absence of his mother, he went for a stroll. Naturally the mother became alarmed at his absence and went on a hunt for him. Wandering along the river bank she met Abraham, but he had grown so much she did not recognize him as her child so she asked him if he had seen a little baby walking around anywhere. "I am he whom you seek," Abraham replied nonchalantly to his mother. He told her that he had made this rapid growth just to show her that there was but one living and true God. Just the connection here is not clear. What he meant to convey was the growing stimulus of vitamins contained in milk and honey.

Nimrod, the King, had an interview with Abraham. Nimrod after the interview thought things over and did not like the fresh manner in which Abraham argued so he sent for him a second time. Abraham refused to heed the summons stating that he expected to be sick in about ten days, the date appointed for the conference. This technic it may be noted is now commonly employed in courts of law when a defendant is desired by His Honor to appear for trial and the defendant for some reason is reluctant to appear. The King and his council after a consultation decided that the fresh young man should be burned. Modern day judges, I am told, sometimes have the same feeling when confronted by stalling witnesses. This shows that the King was much ahead of his time. This is interesting because burning as a means of altering personal opinion was not well established until a much later date, after civilization was more advanced and had attained a Christian status.

We are told preparatory to the pyrogenic display that the camels were loaded with wood for the ceremony but they refused to carry the load and for this Abraham blessed them. The technic of blessing camels is not stated. I have had personal experience in blessing mules and I reckon the technic is the same. Since the camels renigged mules were loaded with the wood and they carried the load without protest. That seems incredible because mules as a class are the most emphatically protesting of all animals. Abraham told the mules that for their willingness to add to his discomfort they should be forever sterile. This explains a fact which has long puzzled biologists—why mules are sterile.

This experience bluffed Nimrod and assuming a conciliatory attitude he asked Abraham who his god was. "He who kills and makes live again" replied Abraham. To prove the latter part of the statement he caused a man dead four years to rise from his grave and bring him a cask, a black raven, a green pigeon, a gayly colored peacock. These being brought to him by the dead man, Abraham cut the birds up into little pieces but preserved their heads and lo! from the heads new bodies sprouted. This puzzled the King and to test his powers further he asked Abraham to reverse the course of the sun, have it arise in the west and set in the east. Since Abraham could not do this it made the King mad because he felt sure this proved Abraham a faker. This account has some basis of fact when we remember that Hezekiah, a later king, accomplished this remarkable astronomic feat with ease (2 Kings, xx: 10). Satan told the King how to eliminate Abraham and his partner, Haran, and showed him how to make a catapult so that he could throw the two into a fire already burning. The contraption worked all right and both were thrown into the fire. The latter was rapidly consumed but Abraham was

unharméd. The coals which were calculated to burn him were consumed and he walked around in the fire for three days and nights without inconvenience, or time out for meals. Nimrod was puzzled by this fact and asked him how it was done. He replied: "The Lord God of Heaven and earth, whom I serve has delivered me." We find this stunt done in the Orient today. Vulgar scientists have found that the "stones" they use to walk on are pumice stones which look hot but are not and can be walked on without any great inconvenience. Because of this demonstration 300 servants of the King followed Abraham home. From here on the story becomes highly technical and cannot be followed.

There is another tale about Abraham which I like better. It relates that Abraham's father had made himself a nice bunch of idols. Abraham broke them up at the instigation of Yahweh. Papa got mad and asked the King to burn him up, in the old ancient sense. I like this version because we can draw the moral that: Do Yahweh's will and you will be fire-proof.

However, following such a remarkable childhood, it is easy to believe that a great future was before him. Unfortunately our knowledge is dependent on the writings of Moses and his cohorts and the countless thousands of sermons preached about them. It is impossible to form a clear notion of Abraham's accomplishments. That he was the father of the chosen people is conceded. He did some funny things but we must not overlook the fact that his life was no better than the morals of that time. We may regard him as the permanent chairman of the convention preceding the election of Moses and he is not responsible for future events. If this view is not sufficiently confusing the reader can add to it enormously by consulting the Encyclopedia Britannica. Now comes the aggravating

part of the story. After learning all about Abraham by reading and listening to sermons one is shocked when biblical scholars tell us no such person as Abraham ever lived.

I am reminded of a remark Mark Twain once made when told that no such person as Moses ever lived. "Very well" he replied, "then it was another fellow of the same name." I feel the same way about Abraham. You can't fool an old doctor. He knows that in this begetting game you must have a start. Either we must preserve Abraham or resort to the theory of spontaneous generation for Isaac and Jacob.

This biography of Abraham is not presented in any attempt on my part at being facetious. If it is funny, it is so in its own right, or rite. It is germane to an understanding of the parallel genesis of Moses.

III

After the preceding sketchy review of the childhood of Abraham, the history of Moses will be easy to grasp. Before Moses was born the reigning king got word that an important person was about to see the light of day. Balaam, the person noted elsewhere as having or being possessed of a donkey, which animal is an abbreviated edition of a Kansas mule, the King's adviser reminded the King that fire did not work in the case of Abraham and he would advise a different procedure to meet the present situation. He suggested that the King throw all the newborn boy babies into the river and not depend on elimination by fire after the objectionable party had attained an age when he became capable of talking back. In harmony with this advice the King appointed Egyptian women to serve as midwives to the Hebrew women. Egyptian children were sent into the baths to spy on the Hebrew women to check on those whose contour suggested that they would be in need of services of these Egyptian

midwives. So God saw to it that the Hebrew women were delivered under fruit trees under the attendance of angels who acted as midwives and serving in that capacity, washed and dressed the babies and smeared their hands with butter and honey so that they could suck their fingers in order to keep them quiet. That was a good idea for as we have seen, it worked in the case of little Abraham. Egyptian emissaries, however, followed the women and would have slain the infants but the earth gaped and swallowed up the babies. The Egyptians brought up oxen and plowed over the spots where the babies disappeared into the earth but when the plowman's backs were turned, the infants sprouted from the soil, like little flowers, and walked home unperceived. No better luck followed the attempt at drowning. Two thousand were thrown into the Nile, but the river ejected them onto the banks. The rocks by the contact of the babies melted into honey and butter and the babies were thus nourished.

Jochebad was delivered of Moses at 3 A.M. This sounds plausible. Any old doctor can guess that the night was a stormy one. A very clever trick was tried. Everybody knows that when one kid squalls others within hearing all will do the same. Just as everybody knows that in church when a deacon coughs soon everyone else also coughs. Merely the power of suggestion, not an expression of derision as I thought in my childhood. Therefore Egyptian women with nurslings were sent to mingle with the Hebrews. They stuck pins into their own babies so that they yelled; it was expected that this would tune up the Hebrew babies also. Moses' mother was wise and to circumvent this trick she worked a basket of papyrus flags and sealed it with pitch without and then put Moses into the basket and pitched the basket lined with pitch containing Moses into the bulrushes.

The rescue of Moses by a princess is one of the most

exciting stories in the Bible. There are several versions of the story but the most interesting legend, related by Potter, has to do with the reach of the princess in securing the basket. The distance figured in modern terms was about 60 yards. That, it must be conceded, is some reach, almost equal to that of a modern coed greeting a freshman boy friend at a fraternity dance.

We are told that Moses came near not being at all. When Amram, the prospective father of Moses, learned about the order of the Egyptian King to kill all boy babies, he got a brilliant idea. No king should kill his son, there just wasn't going to be any son. He knew the causes of sons and knew about the necessary equipment needed to produce them. So he got a divorce and went to live in a bachelor's club. But he reckoned without his daughter. She was nine years old and she told her father that his act was worse than Pharaoh's decree. The Egyptians would destroy only the boys but by his scheme there would be no girls either. That of course melted the father. The girl was only nine years old but she was precocious and figured out that life would not be worth living without boys. If there were no boys, it would be better if there were no girls. So father hunted up mama and the threatened nonexistence of Moses was averted. The whole history of the world was changed by a little lady aged nine years. Here the story has a modern turn. We see the same idea expressed by 'teen age girls who when they see a uniform they see the future papa of their children. Don't blame the girls, the responsibility rests on him who made the uniforms necessary: Moses.

A high school girl tells me that as the result of her biblical researches she concludes that Moses was the bastard son of an Egyptian princess, hence he was no Hebrew at all. This opinion is based on one statement that "his mother was a princess and his father he knew not at all." There is a tradition that Moses was the

product of immaculate conception as were so many of the ancients but this came as an afterthought. We are faced with the possibility that Moses was half Egyptian, half Holy Ghost.

Frazer doubts the truth of these stories because they sound so much like legends current at the time and were likely to be attached to anyone who afterwards achieved prominence. It was just a variation of the immaculate conception as a sign of unusual achievement. Press agent stuff, in other words, just as a campaign manager's whose job is not to overlook any virtue his candidate may possess. Frazer has something of the same idea when he suggests that some Hebrew editor writing at a much later date, being in need of something to bolster up his hero, seized upon a tale likely to be useful.

Be this as it may Moses still had to follow a pattern. He got to loafing around a well, purpose not stated, where pastoral maidens were wont to water their sheep, Zipporah being one of them. He had precedent for going to a well. Jacob followed this hunch with a like result. But Moses was no piker even then; we learn (Exodus 2:15-22) that he watered the flocks for Zipporah and her sisters. But according to legend this job was easy. He had only to draw one bucketful and the water then flowed of its own accord.

But he was cheated shamefully. Moses went, according to Hebrew legend, like a man to ask the lady's father, one Jethro, for her hand. The old man evidently did not like the shape of Moses' face and threw him into a pit. But the young lady fed her boy friend in the pit for seven years without her father's knowledge. After seven years one day she nonchalantly approached her father and delivered herself of the following speech: "I recollect that once upon a time thou didst cast into yonder pit a man that had fetched thy tree from the garden for thee, and thou didst commit

a great trespass thereby. If it seemeth well to thee, uncover the pit and look into it. If the man is dead, throw the corpse away, lest it fill the house with stench. But should he be alive, then thou oughtest to be convinced that he is one of those that are wholly pious, else he had died of hunger." Something wrong there it must be noted because the pious get just as hungry as sinners, even more so. One cannot repress the observation that one would need to be very pious indeed not to smell seven years after death.

But of course father did not know about daughter's culinary activities and he replied: "Thou has spoken wisely." Then continued, "Dost thou remember his name?" Zipporah, thinking hard, said, "I remember he called himself Moses the son of Amram." Thereupon Jethro called into the pit, "Moses! Moses!" Then Moses answered cheerily, "Here am I." So Father pulled him out and gave him his clever daughter as wife, together with a handsome dowry. It is interesting to note that her father's name was Jethro according to Exodus 12:21. In other places in the Old Testament he is referred to by other names. Perhaps we may conclude that he was a termite.

Having got Moses successfully married off it would be pleasant to say they lived happily ever after but truth compels us to note otherwise. There is another event at a well, whether before or after the above occurrence, we do not know. The account has it that he met at a well a number of Egyptians who made naughty remarks to the ladies gathered there. Coming in defense of the damsels Moses tapped one of the rude Egyptian boys on the chin and that was the last of the naughty boy. As a matter of heredity it is worth noting here that Moses proved himself quite a belligerent person at this early age, a trait that was much in evidence in later years.

We are compelled to record a very distressing event.

If Moses lived happily ever after, his wife did not. He was constantly looking for trouble, and it seems also wives. We see recorded in Numbers 12:1-16 that he acted something scandalous. He married a negro girl without the formality of divorcing Zipporah. But it wasn't Moses' fault. The negro girl, Therbis, was the daughter of the Ethiopian king. When she saw Moses leading his troops, she fell in love with him, at first sight—in fact before he had any sight whatever of her, and sent a trusted servant proposing marriage. Not having seen her, as above noted, but she being a princess, Moses consented; anything to please a lady. At any rate after he had defeated the Ethiopians he "gave thanks to God and consummated the marriage." We are not informed whether he gave thanks for victory or for the invitation of the lady, but knowing our hero we have an idea.

Of particular interest to us doctors is the following: Miriam the sister of Moses, criticized her brother for marrying beneath the family. This made Moses mad and he and God made Miriam leprous. No doubt he carried some leper bacilli in his vest pocket and just put a few in his sister's nose. So far so good. But we are told Miriam became white as snow. This is too much; the diagnosis was wrong, leprous people resemble bar flies in the last stages of inebriation.

Moses became somewhat mixed in his mathematics. According to the Bible (Judges 4:11) he had three wives. He sent his first wife and the children (Exodus 18:2) back to her father. Evidently Moses became thoughtful because it is stated he "became slow of speech and slow of tongue," the only time in his eventful life when a flow of conversation failed him. He ascribed his matrimonial difficulties to a clear case of incompatibility, the cause of the incompatibility being first the negro girl he had married sight unseen. That is strange too because usually when incompatibility

develops language flows both freely and fiercely. We are told that no one can serve both God and woman, or better stated, women. Bishop Hall remarked: "He hath need to be more than a man that hath a Zipporah in his bosom, and would have true zeal in his heart." It would seem that Moses was possessed of too much zeal.

His father-in-law (Exodus 18: 1-12) got Moses to meet his daughter, that is Mrs. Moses, and her two children. It is recorded that Moses kissed his father-in-law. Which of the two showed greater courage we are allowed to make our own guess. It is easy to understand that any father-in-law finding that his son-in-law is doing better than expected might well have an urge to kiss him. This we understand took place when or after Moses went into the wilderness and brought forth the decalog. On this was written "Thou shalt not kill" so the only alternative was to kiss and make up. This episode is enough to show that those higher critics who think Moses was five fellers are wrong. That he kissed five sons-in-law in a row is just too much to believe.

The higher critics can be so annoying. They argue about all sorts of things but avoid the most interesting. For instance, we are told Yahweh got mad at Moses and was going to kill him, Exodus 10:24-26. One wonders what he was mad about. Moses fell into a great sickness and was about to die and Mrs. Moses figured it out that the trouble was Moses Junior had not been circumcised. She did the operation with a stone and threw the amputated dermal remains at Yahweh's feet and said "Now I am a bride." Moses got promptly well. All doctors wonder what it was that made Moses sick. It must have been the influence of something or other or perhaps it just threw Moses into a hysterical fit of fright and that really Moses was not dangerously sick at all. The nonmedical reader

may think this is an attempt to be funny or it is sacrilegious or something.

Here is a case from real life which may be a parallel. A doctor had a patient who had become very nervous, the cause of which the doctor could not determine. One day the patient returned home all doubled up, threw himself on the bed and cried out to his wife that he was dying. The wife all sympathetic and frightened sent for the doctor. After a very cursory examination the doctor asked the wife to leave the room. After she had left the doctor said to the patient none too kindly, "Now tell me the truth." The doctor promised the patient it was a professional secret between the two. The patient admitted that just previous to the onset of the pain he had dressed rapidly. In a few minutes the patient was lying straight on the bed in perfect comfort. When the doctor entered the room where the frightened wife had retreated she exclaimed "Will he live?" The doctor assured her that her husband was all right and added "I just unbuttoned his upper pants' button from his third vest button." Likely this is the explanation because Moses got into a jam with a colored girl which if the wife found it out would throw a lesser man into a fit. Of course these cases are not exact parallels because likely Moses did not wear pants and a vest.

After Moses got over his scare, he tried to rid the land of the whole phallic technic; we are told that centuries later, quite a long time later in fact, the Hebrews still claimed that this was a part of the Mosaic law and they cite Leviticus 12: 1-8 as evidence. This seems to be proof that some later writer slipped something back into the sacred writ, if Moses really removed it. We doctors cannot understand what this has to do with Paradise, at least the paradise that comes after death. That the ritual was restored is further proved when Jesus (John 7: 22) recognized some in-

consistency: "Moses gave unto you circumcision," then he comes to the defense of Moses as an afterthought, "not that it is of Moses, but of the fathers." At least, it concerned chiefly the fathers, past or future. But this is further complicated. Potter says Moses' lack of co-operation described in Exodus 4:24-26 was Moses' struggle to purify Hebrew religion. Just how he went about to study the results is not stated. Those persons who are at all sensitive should not pursue the subject further lest he have his, or her sensibilities shocked. Lee, the first Quaker, notes that Jesus did not think much of circumcision because it is not related that he recommended a continuance of the practice. A learned friend of mine tells me that it was purely a hygienic measure but in order to induce his people to submit he had to put the fear of something or other into them. This seems like a correct interpretation because it is the technic still in use.

IV

Despite his matrimonial complications Moses did a lot of other things. His chief accomplishment, according to what we are taught, was in taking his people out of captivity. We will ignore the attempt of the higher critics to prove that he and his people were never in captivity. The Egyptians counter with the statement that the Hebrews smelled so badly that they chased them out. This is probably slander but we need to consider both sides of the question. However, we must remember that the Hebrews were nomads, likely without portable bath tubs. Some naughty persons have even said that they were afflicted with infectious diseases, chickenpox likely—leastwise it is most commonly seen in "chickens." But this should not be held against Moses for once facilities were available he established sanitary laws for which he is still credited.

However, one can't be sure that Moses is to be cred-

ited with his sanitary innovations. In fact the records show that these laws were general knowledge for centuries before. Be that as it may self-effacement was not one of his shortcomings. He said he invented the Ten Commandments but it is known these were in more or less constant use for 600 years before his day. Some of the Mosaic Law goes back to the Babylonian Code of Hammurabi of about 2100 B.C. Therefore, sanitation or not, he was no historian.

We know that Moses was a most skillful politician and knew full well how to play both ends against the middle. Potter says "Such relics of animism and primitive religion as the rites of the red heifer (Numbers 19), the release of the scapegoat (Lev. 16), the elevation of the healing serpent (Numbers 21: 4-9), and the ordeal of the magic water for the cure of chicken-pox in suspected adulteresses (Numbers 5: 11-31), while these seem to us revolting examples of superstition and have many parallels in the religion of undeveloped races, were nevertheless countenanced by Moses. But he was careful to connect them all with Yahweh worship, and removed some of their objectionable features. He probably had to leave the people a few superstitions or they would have turned away from him altogether." He surely left them plenty of concubines and they were not fictitious. Also we are told "The Lord said to Hosea, Go, Take unto thee a wife of whoredom." They certainly had a complicated social system. So it seems Moses left his people enough to keep them in good humor while he civilized them.

V

Moses also had quite a reputation as an author which endured until the higher critics got to work on the books it is alleged he had written. Because of them we are unable to identify Moses. Nothing is more confusing than the attempt to trace authorship of the

Bible. For instance, Hannay says Yahweh was shut up with 70 wise men but according to Numbers xi, 16, it was Moses who was shut up with the wise men with bulging foreheads. He further states that "Ezra had the advantage that he was a trained Babylonian priest saturated with the lore and cosmogonic fables of the 'Mother of Harlah'." Who this lady was the records do not say but we are told that between Ezra and her was molded the Jewish, and through it the Christian religion.

Then to confuse the problem still more, that the "Holy Book was recreated from fragmentary copies, memory and tradition" and then too if the passages were not understandable they changed them to make them intelligible. They changed a few words "which related to ancient superstitions, and especially words relating to phallic observances, so that obscure rites which were quite moral and natural to an early people might not shock and degrade those whose ideas had been changed by the advance of civilization." Finally we are told the King James translation was necessary "to attune it to the nostrils of the English people of that time." The English nostrils of that day were not very sensitive to noxious emanations or further changes would have been made.

So it is apparent that Moses did not have much to do with the writing of our Bible as we know it today. Mann says (p. 55-6) "That Moses did not write the Pentateuch, Kuenen established thirty-five years ago, as well as a negative can be established. Add to this the fatal fact that no shred or proof is to be found that he did write it. All we can say is that, in an uncritical age, such an authorship was simply assumed and that it has since been perpetrated by tradition. Before a scientific study of history and a just criticism this unsupported assumption falls to the ground; and

with it must go the whole conception of a thoroughly developed system of religion having been given outright to a primitive people. The notion that the Hebrews in their early history were monotheists, having a pure and exalted worship is akin to the fallacy that the wild North American Indian holds allegiance to one Great Spirit. As has been truly said of our Indians, so we may say of the Israelites of the time of their migration to Canaan and for centuries afterward; their religion was little more than a form of demonology. They believed in the existence of all the gods they ever heard of, and all were blood-thirsty, treacherous and terrible. Their preference for Yahweh lay in the fancy that he, while the most terrible of all, was pledged to favor Israel." No wonder Moses' people thought his Yahweh was all right, considering the privileges he allowed. It had an appeal just like the old age pension has today, a remedy for a misspent life.

Yet Moses excites our sympathy. Even his death was not peaceful. We are told that the "Jewish rabbis assert solemnly and beautifully that God drew out the spirit of Moses with a kiss." After, it must be added, his father-in-law failed to accomplish the act. A thing it appears then is not beautiful unless it works.

Potter truly sings the swan song: "Moses' Commandments and his faith in a personal God are even now the moral code and daily religion of millions. His burning bush still lights the world." Bush or not, something still burns but we seek in vain for any moral code. His moral code as recorded in the Old Testament is so rotten that it makes Boccaccio's book, supposed to be not nice, read like stories for Sunday-School children. Anyone doubting this statement should play Micah on the phonograph for the children, and Exodus vii to his 'teen aged daughter.

It seems strange that not until recently has a popular

book appeared to show "The Bible is Human." That is obvious judged by the few citations above given. Human indeed but presenting only the dawn of civilization.

VI

It would be a terrible disillusionment if the higher critics were right and Moses was at least five persons or even no person at all, that he was but a myth. If Moses was a myth, we are confronted with the distressing question: Whence came God? No Moses, no God? It is this fundamental problem that makes it so necessary to study the life and works of Moses. Herein may lie the genesis of war. Considering the complicated Genesis of the Bible and the various implications one has difficulty to keep from expressing the logical conclusion. It makes one sick to think that this is all that we have to support us in our hour of need. "Oh God, bring us peace." It is complicated by the evidence that the people, the morals of the people, compelled the making of the Scriptures more decent.

But our confusion about Moses is only a part of our troubles. Closely associated with Moses we must mention the angels. Before God made the earth he created the angels. They had free intelligence and free wills. Happiness and freedom of will was granted only on condition that they obeyed the will of God. Some did and achieved happiness, others used their free will to oppose God and they found unhappiness. In Revelation xii, 7-9, we are told about a fight in which Michael and his angels fought against the dragon. There was a great row in heaven and the great dragon was cast out. This dragon was a snake and was called Devil and Satan; he was cast onto the earth, this before the earth was created. Isaiah tells us what the fuss was about. The Devil said he would exalt his throne above the stars of God. Modern politicians have the same

idea with the same result. This event happened several years before Luke made the statement in x: 18, "I saw Satan like lightning fall from heaven." Luke was a doctor, let it be remembered, so it must have been the truth, at least the gospel truth which is not exactly like scientific truth.

VII

If the critics are right and Moses never was, we must search the Old Testament for other persons capable of the authorship of the Pentateuch. I shall offer just a few of the most available candidates.

ADAM

Adam is the next likely candidate. Archeologists have proved that he really was not the first man. He was the first man only in the sense that candidates occupy this rank. But he really was a rather decent person. In favor of this is that he differed from Paul. Paul said woman was created for man, Adam assumed she was of him. There is a vast range of moral difference between the two concepts. The interlude everyone knows and it is painful to note that Adam accused Eve of giving him the crabapple. But really it was not Adam who said this. Someone else said he said it. Anyone who knows the import of the snake in mythology will see what I mean. Adam was decent and quite up to date.

Once he got his eyes open, Eve's shape made him think of angels. They were not yet married. Adam talked like a grocery store clerk in love. He just naturally knew everything about his environment and thought he was the chief object of creation. That delusion still pervades all of us at times, especially just after he has contacted the only girl and receives an affirmative reply. He thinks he won her. This reminds me of an occurrence in my boyhood. I was working for a neighboring farmer, together with an older boy.

The farmer's wife, a cultured woman, said graciously to my fellow workman, "Nels, allow me to congratulate you on winning Nora as your prospective bride." Nels replied rather testily, "Huh, she ban easy ketched." This remark was quite a shock to me.

My first acquaintance with Adam himself was unfavorable. I was asked in Sunday school who was the first man. I proudly replied, "George Washington, first in war, first in peace, and first in the hearts of his countrymen." The reaction I got was very humiliating. I learned then that the first man was Adam. I had no conception of how big he was. According to Baring-Gould Adam was so tall that his head reached into the seventh heaven. That was obviously in his grocery clerk stage above noted. We are told that when he made his big mistake God pressed him down to the size of a regular man. Really this is so like the usual postnuptial experience that one need not invoke a celestial power. Even at that Adam had no soul until God blew it into his nostrils after which he could see. This does not say anything about God ordering Gabriel to bring him all kinds of clay when he started to make Adam. It was quite a shock when I got hold of a book entitled "Pre-Adamites" written by a distinguished geologist, with printed pictures of the peoples alleged to have lived a very long time ago.

The advent of Eve needs little attention if we are to follow the grocery clerk tradition. God put Adam into a deep sleep, just as happens in the case of our young friend, took a rib out and made of it a wife for him. It was the left fifth rib, the one nearest his heart. The other version is that being of osseous origin accounts for the linguistic proclivities of ladies of leisure. Be this as it may we are told that Adam and the lady lived for 500 years in Paradise before they ate anything, the longest honeymoon on record.

If I had a desire to be facetious, I could mention the tale that God cut off Adam's tail and made Eve out of it. There is a painting extant showing Adam still possessed of his tail. We are told that Eve was made of the tail so that she could spend her life swishing the bugs off of Adam. Nevertheless that tall tail tale is as authentic as the rib one.

Of the Cain and Abel story all that I remember is that Abel being a sheep-raiser brought a nice lamb for sacrifice; Cain was a farmer and brought only a nubbin to the sacrifice. The sermon preached on this quite properly emphasized the fact that one should bring of one's best to the sacrifice.

I had another difficulty. I heard about Cain's bad disposition, but nothing was said about his domestic affairs. My inquiry naturally was, in view of the fact that he did not have a wife whence come all the Canaanites. Did that give rise to the expression to raise Cain, when one musses up the landscape? This inquiry only pushed me further into the dog house.

ISAIAH

Among the contemporaries of Moses the most likely person on whom we can pin the responsibility of writing the Old Testament is Isaiah. It transpired that someone was inspired, but not necessarily before he expired, because it has been proved that many of their writings were written long after they were dead. So also the subject of this sketch.

Be this as it may, credit of authorship of the Pentateuch is accorded him and he had every qualification to head the list of authors. He was a bit rough even for those days. Dr. Cheyne apologizes for him to the extent that he finds Isaiah did not write all that was ascribed to him. The voluntary assistants in authorship meant well. The statement was made that the angel of Yahweh went into the camp of the Assyrians

smiting 185,000. When the voluntary coauthors got through working on it, it read: "When they (the Assyrians) arose early in the morning they were all dead corpses" establishing something which I can confirm. In my early years I noted that the corpses on which I did autopsies were dead. It would have been more delicate to have said that when the breakfast bell sounded the next morning nobody responded. This would have allowed the gentle critics to tell us that they went away, possibly to go fishing or something.

This episode appears today as being a bit rough (2 Kings 19: 35) but the Assyrians were a bad bunch and threatened the Jews, which showed poor judgment. After that Hezekiah, the King, got sick but Isaiah petitioned Yahweh and the sun dial was run backwards (2 Kings 20: 11) and the life of the sick King was prolonged 15 years. Obviously the trouble with the King was a cardiac decompensation and bedrest and digitalis did the trick of turning back the hands of time, as it does countless patients today.

During their captivity the situation was purely a political one but the Jews figured that their misery was due to the sins of the people in worshiping other gods besides Yahweh. Perhaps they were not so dumb though it sounds like an alibi. We find ourselves in much the same predicament now but our politicians furnish the camouflage. The bugle call in that early day sounded: "Comfort ye, comfort ye, my people, saith your God." Now we have a division of labor. The clergy blow the trumpet and petition God, the politicians shout "Gather up old iron and rubber, and forget about our sins of omission."

ELIJAH

I was under the impression that Elijah was Moses' successor. Whoever it was Elijah succeeded, he was a mighty person to me in my childhood. He was a mys-

terious being who guarded boys from youth to death. He blessed the faithful appearing as a reptile or a nobleman by turns, even as a harlot. He appears as a meteor from Gilead, wherever that is, and destroys men with fire. He killed a child he saw carrying an image. He had his nerve for he "charged God with turning Israel's heart to evil." He divided the Jordan and ascended to heaven in a chariot of fire. He made iron float. He slew the children who mocked him but he was kind to the widow because it is told he increased her oil, whatever that means.

Elijah is of particular interest because one gets him mixed up with Elisha. As I remarked elsewhere, several persons are so nearly alike as in the case of Abraham and Moses that one suspects the two authors were describing the same person. The following is a brief summary of the life of Elijah, together with the authority therefor:

As prophet, predicts great drought (1 Kings 17: 1);
hides at brook Cherith, fed by ravens (1 Kings
17: 5);

raises the widow's son (1 Kings 17: 21);

slays prophets of Baal at Brook Kishon (1 Kings
18: 50);

flees from Jezebel into the wilderness of Beersheba
(1 Kings 19);

anoints Elisha (1 Kings 19: 19);

by God's command denounces Ahab in Naboth's
vinyard (1 Kings 21: 17);

two companies sent to take him prisoner burnt with
fire from heaven (2 Kings 1: 10);

divides Jordan (2 Kings 2: 8);

taken up to heaven by chariot of fire (2 Kings
2: 11);

his mantle given to Elisha (2 Kings 2: 19);

appears at Christ's transfiguration (Matt. 17: 3).

If ever any person's life was duly certified, as the references show, this is the party. It is also evident that he was quite a busy person.

ELISHA

As remarked before the biographies of Elijah and Elisha are so much alike that one would believe they had to do with the same party. But not so. We are told that the two went down to the River Jordan together and Elijah took his mantle and smote the waters and they were divided hither and thither so that the two walked over on dry ground. After they got across Elijah asked Elisha what he could do for him before he was taken away. That is accepted as evidence that they were two biologically separate persons. The other possibility is that he might just have been talking to himself. Inebriated persons sometimes address themselves the morning after in uncomplimentary terms.

Be that as it may, Elisha was a remarkable person in his own right. The following is his record:

He heals the waters with salt (2 Kings 2:22);
causes bears to destroy children who mock him (2 Kings 2: 24);

his miracles: water (ibid. 3: 16); oil (4: 4); Shunammite's son (4: 32); death in the pot (4: 40); feeds a hundred men with 20 loaves (4:44); Naaman's leprosy (5: 15); iron swims (6: 5); Syrians struck blind (6:18); miracle wrought by his bones (13: 21).

Those higher critics who teach that obviously Elijah and Elisha are one and the same party, commit a base slander, on somebody. To harmonize the records and the conclusions of later critics I will suggest that most likely they were identical twins.

JOSHUA

Joshua was my pet peeve in my childhood and he

still arouses within me memories of some of my most unhappy hours. It seemed to me that preachers deliberately selected this remarkable character as text during the summer months. As the stopping of the sun in its orbit was vehemently proclaimed I naturally watched the movement of the shadows on the floor of the church. The church of course had no shades. Shades were worldly, also expensive. The shadows simply did not move and it seemed that old Joshua was on the job and by slowing the sun deliberately lengthened the duration of the sermon and by the same measure delayed dinner.

The significance of Joshua is to be found in relation to Moses. Now Moses as is well known chose Joshua as his successor. In modern setting this was done because Moses thought Joshua would carry out his policies. What they mean is that his policies would be placed into execution. Unhappily they cannot be carried out in a literal sense. At any rate it is all written out. Joshua thereby became a necessary party to the integrity of Moses' veracity. Here is the point: when astronomers got to questioning the integrity of the theory that the earth is the center of things, it threatened Moses' account of creation. If the earth did all the moving and the sun did not, how could anyone stop the movement of the sun? If the astronomers were allowed to prove their point it practically eliminated Joshua, impugned the veracity of Moses, set in doubt the whole question of revelation and all that. All we can say of Joshua is that he was no astronomer and there is no evidence that he was a writer.

RUTH

Ruth is mentioned here both because she is the subject of inspired writings but even more so because it shows that the parties were human, after the kind of that day. She furnishes the subject for a chapter in the

Old Testament, and also the plot for all the mushy novels that have been written since that day. The Book of Ruth is the first I ever read from beginning to end. The reason I did this is because of the antagonism a sermon I once heard caused within me. I did this because she furnished the text for a sermon I heard which has remained in my memory to the present day. The sermon was delivered by a divinity student of real ability and commanding presence who later became a college president. "I have today to tell you about the creation of a happy home" was his opening remark. What followed I do not remember but it was along the line I find in print as follows: "We see Him exalt into glory a woman who was not of Israel's race and blood and make her a vital link in the chain of human ancestry which binds the world's Deliverer to all mankind." Exalted into glory!

Stripped of nonessentials the story has to do with a widow who had a daughter-in-law who also was a widow. Ruth said to her mother-in-law: "Let me go and glean ears of corn in his field." The male part of the plot of course was Boaz. She went and at once gleaned corn, also got the eye of Boaz. He inquired man-like, "Whose damsel is this?" What he should have asked was "Whose sucker am I?" At dinner-time he said to the damsel "Come thou hither and eat of my bread." She heard him the first time. Scene: Nightfall. Naomi, the mother-in-law comes into the picture. She said to Ruth: "When he lies down, mark the place." She did. The instructions were that when he lay down she was to uncover his feet and lie down. About midnight he waked up, that is to say of course his sleep was interrupted, and he discovered a woman at his feet. On inquiry as to who she was he got the reply: "I am Ruth, thine handmaid; spread therefore thy skirt over thine handmaid." The use of skirt in-

dicates obviously that pajamas had not yet been invented or discovered as the case may be. "I will do to thee all that thou requireth." I hasten with the story which says "So Boaz took Ruth", really vice versa, and she was his wife or he her husband really. She bore him a son and then there began a series of begetting until we arrive at David. If Ruth was not of Israel's race we wonder as to the purity of the blood of the descendants.

About David, I remember very distinctly that he got chilly and his clothes would not keep him warm (1 Kings 1: 2). So one of his servants suggested that a young lady be found and let her stand before the King. So they got the damsel and she lay on his bosom and did all she could to cheer him but it did not work. Of course, we know now it was a question of endocrine atrophy, and had nothing whatever to do with art, but the servant had a correct notion as to what would most likely warm the old boy up.

I have remarked before at the remarkable parallelism of instances in the old history. Moses got mixed up with an Ethiopian princess. David had a like experience. One day while loafing around on his rooftop he beheld across lots on his neighbor's place a very handsome lady taking a bath in midafternoon. He called a servant and had the lady kidnapped. One servant did the job, no account of any great struggle. David on closer inspection concluded she was worth keeping. The lady had a perfectly good husband, one Uriah, a knight in the army. So David ordered a battle and arranged it that Uriah should lead the charge. Uriah was killed. But the lady turned out to be what in modern terminology is a gold digger. The remainder of the story need not be told. It is painful to note that after a long series of begetting we come to the scene in Galilee.

SOLOMON

The most prominent of my old friends, Solomon, brings mixed emotions. Even the higher critics do not deny that he actually existed. He is registered not only in Jewish but also in Mohammedan literature. He reigned over Israel about 1011 B.C. He, too, suffered much in the hands of his friends. He is said to have written Proverbs, Canticles, Ecclesiasties, Wisdom of Solomon, Psalms of Solomon, Odes of Solomon. The Police Gazette was not yet in existence.

My first introduction to Solomon was in a sermon delivered by a very large bishop who intoned with much positiveness that Solomon was the wisest man who ever lived or ever would live. This excited opposition in my small mind for I had definitely assigned my Pa to that role, so I looked first at Pa and then at the speaker, my face registering disapproval which pleased my male parent.

One of the most interesting events in Solomon's life which showed his sincerity: We are told he went to Gideon and offered a thousand burnt offerings, please note he always dealt in round numbers. He humbly asked during the ceremony that the Lord give him an understanding heart that he might judge between good and bad among his people. This is the finest spirit one finds in the Old Testament. One has a feeling of helplessness when confronted by one prospective wife. The magnitude of his problem must have been staggering.

A rare quality in the character of Solomon was his diplomacy. He made arrangements with Hiram, King of Tyre, to furnish him the material and men to build the temple. This technic is still accepted as smart diplomacy. We do not know whether or not Hiram ever awoke to the fact that his ego had been exploited. Likely not, for such persons usually do not.

Solomon registered thirty thousand of his own men telling them that he did not intend to use them in the building of the temple because Hiram's men would do all the work. After he had his men catalogued, he changed his mind and had them do the work. This bright idea of using the men he had registered was due to Divine Revelation. He did not claim to have planned it that way.

We are told at great length about the capacity of Hiram to work in brass. Solomon kept encouraging him by saying that he was the greatest living worker in brass and that he was doing it for the Lord. As one reads the account, one gets the idea that Lord was a synonym for what we now call Democracy but it really was just diplomacy.

After the temple was completed he staged a real dedicatory exercise. Israelites were gathered in a great multitude. Hiram and his men were not invited. Solomon said Hiram's services were not needed, that he himself was a capable workman in brass and really did most of the work himself. This is where the slang expression "brass" indicating impudence, had its origin. We found the same technic used in explaining who won World War I and it is being polished for use again whenever required. In order to distract attention from this fact Solomon made a large prayer and the result was he got credit for this whole stunt. In this degenerate day it would be called clever politics. Today he would not have prayed, but would have rationed sugar to distract people's minds from what was being done to them.

Solomon after he built the temple decided he might need a house, so he built one. Hiram, despite his treatment after the erection of the Temple, provided cedar trees, fir trees and gold as needed. Solomon explained that this was a lend-lease contract but Hiram

had reason to believe that he would never be repaid. Hiram became so displeased that he made a fuss so Solomon gave him twenty islands in the Sea of Galilee. Hiram took a look at them and was still displeased so Solomon explained to what use Hiram could put them. He could use them as a base to sit on. Just what the argument was about we are not told, but in the end Hiram paid Solomon six score talents of gold for the use of the islands. Naturally one feels compelled to speculate on whether Solomon was very smart or Hiram very dumb. One must conclude that both factors entered. No man could have been so smart and no one so dumb. In view of recent events one is compelled to believe that it is a question of a very smart party coming into contact with another party, also smart, but susceptible to the blandishments of flattery. Tell almost any musician or bar fly that you think him a second Caruso and he will sing for you.

The most remarkable thing about Solomon was the great attraction for the ladies. We are told the Queen of Sheba came to meet him. To make a story short she told Solomon that he was quite a fellow and gave him 120 talents of gold. Solomon we are told gave her what she desired and when she went back home, Solomon built harps and psalteries, so evidently a good time was had by all.

Solomon seems to have got a wrong idea from this episode. Though we know he was well provided with wives and hired girls, he loved many strange women. The Lord had told Solomon to confine his activities to Israel. Notwithstanding, Solomon went out among the Ammonites, the Edomites, the Zideonites, the Hittites, and the Moabites, and took some extra bites at other ladies in a miscellaneous way. The Lord in view of these carryings on told Solomon that his heart was

not perfect. The very idea! If Solomon's technic as a lady attractor was not perfect, he certainly was the most successful man in history, either that or the easiest sucker in history. Vast opportunity wasted. It is not recorded that he had more than two children, Hadid the Edomite and Rehoboam. Nevertheless in repentance Solomon burnt incense and burned sacrifices, and while confessing past sins got into an entanglement with a stray princess. Solomon realized that he had taken too much of something or other, repaired the (or his) breeches in his conduct the best he could but the Lord took his kingdoms away from him and gave them to Rehoboam. Solomon the wisest man who ever lived? That he was a diplomat he proved, but diplomacy is a sign of wisdom only if it works. As a final note one must record that despite his vast experience Solomon we are told went to sleep with his fathers. This was the height of tact because it was obviously impossible to have himself buried with each of his 700 wives. If that had been done he would not have been Solomon, but hamburger or sausage.

I pause here to note the one moral lesson the Old Testament teaches which is as valid today as it ever was. Moses got mixed up with an Ethiopian princess, David has an army officer's wife kidnapped, a son trades a kingdom for a particular lady, Solomon gets gay in his old age and the Lord calls his time. The moral lesson is this: Any man who has a wife, and even if he has none, if he cavorts with a miscellaneous lot of ladies, sooner or later he will take on one too many. In modern life he gets worried and has pylorospasm, then ulcer and if he does not die, through the intervention of a surgeon he wishes he had. Nowadays it is the God of science who holds the stop watch. Do one thing and the inevitable follows, cause and effect followed to its end—that is science.

JONAH

He was the friend of my boyhood and always was my favorite subject for a sermon. It is the most exquisite piece of humor in the Bible, and this made time pass quickly. In Jonah's attempt to escape from his job he got into a boat which caused a storm. The storm was calmed when our hero was dropped overboard. In my day it was a whale Jonah swallowed. When zoologists discovered that whales were not fishes the text was changed so that it read that Jonah was swallowed by a big fish, that God made a fish big enough for that purpose. That heightens the humor. Now the higher critics spoil my story by assuming that the whole show really never happened but that the story was only a parable told for the purpose of illustrating something or other. Later researches have shown that the storm was not an oceanic storm but was just a fit of anger on the part of Mrs. Jonah because Mr. Jonah was loafing. The parable obviously then is to teach one never to lie to his wife.

Happily present day clergymen take no stock in this higher critic stuff, for every now and then I get over the radio a sermon presenting my old friend with all the self assurance of old, whale and all and then my childhood comes to me again. There is this to be noted: While it used to take two hours or more to tell the story, now it is done in less than fifteen minutes. Just after the radio deposits Jonah on the shore, I hear "Calves up a dime," called by the live-stock reporter. Thus science abbreviates the ecclesiastic message and classifies our friend.

VIII

The foregoing digressions show clearly the difficulty in trying to evaluate the Bible. In view of this fact it should not be sacrilege to examine the facts related in it. Moses or the Mosaic influence did something for

the people. Though everything associated with this influence is pure myth as I tried to show in the chapter on mythology, there is something beyond myths that seems to beckon to even the dumbest mind, beckon to a higher end. It is because of this something, call it spirit if one will, that exerted some marked influence throughout the work of many of the Prophets. Some of them even approached the height of a real religion.

Moses suffered much from his friends. We are asked to believe that which obviously is not true. But the main cause for resentment is that all these sermons ended in impassioned appeals to have faith. Faith in what? Faith in those who preach to us. They were in my childhood according to their own statements, ordained, anointed by God. All the evidence one had of this was their own statements. Faith as shown in the foregoing believes in wonders. It fears examination as one can readily determine if one asks any minister why one should have faith. Faith (Heb. xi: 1) "is the assurance of things hoped for; the evidence of things unseen."

IX

I do believe if we could accept the viewpoint of some recent writers it would explain everything we need to know about Moses and his God. "It is as if Moses had looked into a mirror and recognized God in his own image" according to Thomas and Thomas. "Indeed, the portrait of Jehovah as painted by Moses is the picture of Moses himself, magnified to super-human proportions. The great religious leader, like the great artist, incorporates his own character into the character of his sitter." This is the most acceptable explanation of how Moses got his God, but it does not explain how we got Moses. Obviously the God of Moses was a composite picture of the time. It was the product of minds possessed of limitless imagination,

acute intellect, devoid of any truth. When one considers the unspeakable vulgarity, the cruelty allegedly inspired, and if one adds to this the history of peoples, not unlike the Gipsy tribes of today, which existed in pre-Bible days, certainly encumbering civilization with these things down to date does more than anything else to explain how we got ourselves into the fix in which we find ourselves.

We do not know who wrote the Pentateuch. That the writers were inspired there is no evidence. Did Moses deliberately create a god out of a myth? Did he create a cruel God because he was himself semicivilized? His God did not inspire anyone to write an infallible work.

The Bible is human indeed but it was a very low order of human beings who wrote it; lower in intelligence than any people we know today. Morals they had none. The best we can say for them is that they were unmoral. Kill and fight and beget was their world. Yet these people created the God to whom we have appealed to keep us out of war and appeal to today to bring peace. In the next chapter we must trace the best we can how this God worked in Patriarchal life. Instead of apologizing for them we need to seek to understand them. We need a clear picture of this for somehow a new note has come into life. Civilization is advancing somehow. Perhaps we have overlooked some influence, possibly it is man himself, working through conscience, who should receive the credit for the advance in civilization.

CHAPTER V

THE GOD OF MOSES

In the beginning of the previous chapter it was noted that Moses exerted a greater influence on mankind than any other person who ever lived. We learned in the first place that the life history of Moses was a very complicated one, made so by the fact that there is nothing definite known about him. I also reviewed the lives of the other inspired writers in order to determine just what kind of persons wrote our Bible. The problem is much complicated by the fact that "The Old Testament was gradually compiled from written sources other than the Bible itself; and all through the older material the compilers, or editors, interpolated brief comments and sometimes longer passages intended to point out the moral of Hebrew history in the land of Canaan, or Palestine" (Wallis). There is no evidence that any of the editors eliminated any of the sadistic vulgarities offensive to all modern people. In the face of such obviously mythological characters it is necessary to study them as a unit in order to evaluate the idea of the nature of the God who has molded the thought and character of the world today. The clergy in preaching the authenticity of the Bible are underwriting this sorry mess and brand it with their approval.

I

More than fifty years ago Lyman Abbott, one of the most eminent divines of his day, stated in a lecture at Northwestern University that the Old Testament was to be regarded merely as history. It caused a great furore on the campus and was even a subject of discussion among the medical students of the Prune and Cranberry Club. It shocked us yokels to hear that anyone should doubt the authenticity of the Bible.

In view of the lack of clarity and cohesion of the

Old Testament text, no matter to whom is given credit, or who is blamed with its production, it is necessary to ask ourselves whether or not did civilization gain or lose when Moses moved Hebrew mythology into the world of reality. It was the matter of introduction of the story of creation which gave his teachings tremendous hold on the imagination of mankind. Perhaps in all justice to Moses it must be said that he did much for the people of his time, as has been alleged, but he certainly played a dirty trick on the civilization of today.

He could not distinguish between myth and truth because he knew no facts with which to compare the myth. The incomprehensible thing is that now since we know so much of the truth the myths of that time still are dominating the human race today. What proportion of persons who vehemently declare their belief in what is taught in the Pentateuch have really read it one must ask himself. If so, do they really believe some higher power inspired it? Those few who have really studied it have not done so with an open mind. The whole argument has been that of attorneys for the defendant. To continue to burden a modern world with such teachings, obviously mythological, is the responsibility of others.

For instance one wonders how many people have troubled to study the meaning of the words they read. To begin with, the term Yahweh was used to designate the Eternal. This word was synonymous with Baal. I haven't the remotest desire to bring down malediction upon my head by enlightening anyone as to the meaning of these words. The Encyclopedia Biblica contains much information. I do venture to suggest, however, that the curious read Hosea 4:13 and then look for the chief source of revenue of the temples of that day. This subject must be studied if one expects to understand the history of the church,

even down to today and then try to figure out how it is hoped to make of it a real religion.

No doubt associating a personal God with the story of creation appealed to the primitive mind. Was this master stroke of focusing on creation a matter of accident or was it the product of shrewd thinking? He united his people on the only basis possible. All they knew anything about was, to wit, to reproduce. They knew that generally speaking it was no accident and they thought it was wonderful. No wonder they made of it the center of their beliefs. That was the worst feature of the mysticism of Moses: "It was the mysticism of sex." The natural passions were played up until they became unnatural passions and dominated the mystery of mysticism. "The moment sex ceases to be a servant it becomes a tyrant" (Ches-terton). It was salutary for current use but there is no evidence that it helped their morals as has been claimed. Certainly one searches in vain for anything of help for the morals of today.

We must now, though the heavens fall, find what basis Moses had for creating a personal God. We can learn something if we will but read the history of the eons of time which the primitive mind took in centering on a God clearly enough to warrant spelling it with a capital G. Breasted has shown that the Egyptians first conceived of a God which warranted such use. Like it or not, when Moses made God the author of specific acts he provided a basis for future trouble. He could not foresee that sometime in the future inquisitive minds would be disturbed by things they did not understand and begin to look for the truth. It would not have been so bad if the clergy had left the scientists alone and stuck to poetry. Had they done so their poetic meanderings should not have been disturbed in the least. When astronomers began to get ideas, if they had told their people, "Sure, that is

all right, we are only talking poetically." When we said the world is flat, we were speaking economically. Then we would know just how he felt, but to interpret it in terms of poetry is something different. Instead when all Moses' ideas of creation were blown off of the map by science there was great consternation in ecclesiastic circles, worse still it made them mad.

Professor Cornill tells us that the Hebrew tradition is that the name Yahweh was first introduced by Moses. It was at first a general term but Moses made it a specific one by calling him God. The Professor holds out on us. Moses married an Arabian woman (Exodus 2:21). She was a worshiper of Yahu, which became Yahweh, and finally Jehovah. Moses was in the same position as the most of us; he got his religion from his wife. Also like the most of us he would not admit it. So instead of saying "Wifey told me" he said God told him.

Does anybody want to know what Yahweh originally meant? Suppose that the word *Eternal* be substituted for the word God in all spoken and written word. The Eternal in this sense would have no gender. Why is God He? Why any gender? Why not It? It seems nobody knows what it signifies when a clergyman wears a robe. One cannot suppress a smile when he is told that the Israelites had no word for sex. "He" is just a male. Most assuredly they had the sex instinct and they did not need any word. A dinner bell has no sex, doesn't even say any word but all farm hands understand what it connotes.

It must be noted that Moses never presented God as good, loving and merciful. To attribute any such sentiment is purely ghost writing of the clergy of comparatively modern times in order to make the picture acceptable to modern people. The concept of Jesus, and that only, is all there is in the Bible warranting the use of the word love, and that came a long time after.

When we consider the two stories of Creation as given in Genesis one wonders why the other five available were not considered. For instance in Babylon Ruach was the universal mother god, creation would have been impossible without her and she is the spirit which urges him to action. Had this picture been adopted we would have started with a mother, still the greatest spur to action, and the baby, which would have started us off with the Jesus concept first depicted by the Egyptians.

Instead the Hebrews recognized only a male creator. Their God was cruel, malignant, jealous, vain and spiteful as noted by Hannay, in *Sex Symbolism in Religion*. This and reproduction were the themes along which the inspired ones wrote. Civilization got a needlessly bad start because the authors did not select the nobler things extant in other nations. We are badly in need of a Gibbons to write the history of what is called religion.

The foregoing is a plea for a serious attempt to cull from the records the basis of fact on which rests the God on whom we have depended to secure us peace, to the exclusion of the building of implements of protection in kind from the nations which threaten us, armaments. We can judge efficiency only by results. Like a doctor studying a new method of treatment we must in subsequent chapters honestly study the results. Once we thought sulphur was a cure for diphtheria, experience has proven that antitoxin works better. Antitoxin is an achievement of the inspired minds of human beings honestly seeking for the truth. That is it; the inspired intellect of man, inspired by what? Nobody knows; there the scientist stops.

I have looked far and long to find a basis for the belief that God is good. Perhaps this too is poetry. Certainly there is nothing in the Old Testament to show that He is good, kind and just. Where is the

love that pours down our spirit which fills us up as ministers tell us takes place if we but believe? That is purely the idea of later writers who themselves have no concept of love. Just to look at the Book of Job is enough to cause one to shut his mind against any thought of a good God. In my childhood it was the gospel truth; now it is poetry. To me the Book of Job is the cruelest piece of writing ever printed. Job was an Arab which may account for his selection as the villain or hero of the story. It is interesting to note that God could think of no cruel diseases except those generally known in that day. That on itself shows that it is fictitious. If God was wiser than the author of that screed, why did God not give Job migraine, or a combination of articular rheumatism and itch or St. Vitus dance? We doctors could have rigged up more means of torture than were attributed to the God of that day. Here is one fact that cannot be denied: In all the talking the Lord did, not one single syllable was added to the current knowledge of that day. Yet we are told if we pray for wisdom we shall receive it. Obviously they did not try the experiment. I have. Which is the principal verb in the fortieth chapter of Caesar?

Moses used only ideas long existent in the religions of other races. Nearly all his teachings had been taught elsewhere centuries before. Just why Moses selected the story of Creation he did we do not know. The Babylonians before him had a better one. The Fall of Man was taken from the Babylonian myth. He selected the one most unfortunate for succeeding generations. With Moses progress ceased. He stopped all development of mind by making us believe he was only quoting God, to doubt his statements therefore was doubting God, which in everybody's language is regarded as bad business. Doubt of Moses' brands me as an atheist no matter how noble a God I may have created for myself. The world should now realize it is

not God who is on trial but Moses. It is he, or them, that we have on the witness stand. That is the party on trial, half Egyptian, half Holy Ghost; we do not know. Then what is all the excitement about among both Jews and Gentiles. He was no kind of ours.

Though we admit that Moses' concept did supply the primitive mind with an explanation of first causes which was satisfactory to them, there is no evidence that it served any good purpose. Why did he not say as scientists do now: Nobody knows whence came the vast universe. There is no evidence that anyone was concerned about first causes. They already knew all they wanted to know about causes. Perhaps those people are right who believe that by establishing a supreme Being Moses did secure command over them so that he could teach them to listen to his moral code. We look in vain and no evidence of anything moral. That really is the technic employed by the clergy up to today; scare the daylights out of them and promise them a more abundant life, and they will follow. But just what he taught that was not common knowledge before requires some imagination to understand. Sure he taught them cleanliness of body and many things about sanitation. Be this as it may his Old Testament did teach them a lot of refined technic in cussedness that so far as recorded was not general knowledge before his time, at least it was not common knowledge among the tribes.

Let it be emphasized that the God of the church is the God of Moses. We have no other evidence that there is a personal God. God talked to Moses and to other inspired men, and to no one else in the history of the human race. Inspired men all right, but inspired of and by what? There is no evidence that a mythical person ever talked to anybody. So far as we know the God of Moses talked only Hebrew. I once made a clerical friend mad by suggesting that if

God talked only Hebrew it made it bad for the Germans and the Irish.

However even today it is sacrilege to question the statements of Moses. Question who? Moses. He invented the Santa Claus of the church. It was sinful for the childhood of the human race to think and is so yet, in church circles. The church has fought the establishment of truth, at first violently, now only feebly, because its influence is becoming progressively weaker. Only so because the moral conscience of the average man and woman has superseded the teachings of Moses, spiritually superseded inspired persons who wrote the Bible.

Science has disproved almost everything God was supposed to have told Moses. How about the remainder? Most of the sermons preached today assume that the Old Testament is literally true. Churches today range all the way from those who act the myths to those who just preached about them but whose moral sense tells them it is all nonsense. I cannot see how one can believe otherwise.

III

The influence of Moses' life on civilization may have been great. While the human race has progressed down to the present time, the teaching of the church has not, in most of the fundamental beliefs. The same tenets he proclaimed are today professed through the medium of countless creeds. Most of what he taught is recognized as wrong by most all intelligent people, including most ministers, but the grip of the teaching of the church is retained. It is necessary therefore to learn as much as we can what Moses did teach. We still base our churches on the belief that his God is our God. This is the reason why we must study the things he taught in order to determine the justification of our allegiance to his teachings.

After Moses had the creation of the world finished he gave his attention to other things. He is commonly spoken of as a lawgiver. He went out on a hill and thought the next step over, and God gave him the Ten Commandments. Now that sounds fine as poetry. But the fact is those same laws were current for some 500 years before the time Moses revealed them to his people. Knowing that his people were shy of a knowledge of history it was a safe thing to do. He did not realize that some day some descendent of his in the person of a higher critic would repudiate him and thereby his teachings. He should have set a time limit during which his tales should be operative, say 2,000 years. We are smarter now. Our copyrights last only sixteen years.

The circumstances surrounding the giving of the Ten Commandments is so remarkable that a further account is of interest. We are told it came to pass in the third month after they had come to the Wilderness of Sinai. The Mount was as smoke, with thunders and lightning sound effects. The Lord descended upon it in a fire and the smoke ascended as from a furnace and the whole Mount did quake greatly. And when the voice of the tempest sounded louder and waxed ever more loud all the people trembled so evidently there was quite a racket. Moses spoke, and God answered him in a loud voice. And the Lord came down on the Mount and called Moses up onto the top of the Mount and Moses went up (Exodus 19). And the Lord communed with him and "He gave unto Moses two tablets of stone written with the finger of God."

Evidently the scare was short-lived for when Moses came down from the Mount he found the children of Israel dancing around a golden calf, which his brother Aaron had made. His "anger waxed hot" and his face was red. Evidently he was mad for it is

said he cast the stones on the ground and broke them (Exodus 22:19).

IV

Now comes a discordant note. Bell states that it was Bacchus who was the "lawgiver" and his laws were written on two tablets of stones. This corresponded with the worship of the golden calf above mentioned. Bacchus was quite a gay boy and if anyone wants to read about him, better do it before the children come home from school.

The question of priority is not important because the story is of Persian origin and was originally proclaimed by Zoroaster (Max Muller) as related originally in the Zend-Avesta. Other peoples likewise were favored, Cretans by Zeus, Egyptians by Thoth; even the Mexicans had one, in fact Doane states that about every people when they first took on the semblance of a nation had some such a code as a start. One must feel envious for Buddha had a much better decalog than we have. It is as follows: 1) not to kill, 2) not to steal, 3) to be chaste, 4) not to bear false witness, 5) not to lie, 6) not to swear, 7) to avoid impure words, 8) to be disinterested, 9) not to avenge oneself, 10) not to be superstitious. One could teach this decalog to children without fear of being asked embarrassing questions. Considering that such a fine Ten Commandments were available to him and then viewing the ones made for us, one can easily believe that they are so in harmony with the rest of his presentations.

Other peoples it seems had but one decalog. There were many to pick from and just why Moses selected the Ten Commandments he did the record sayeth not. The two most clearly defined and duly recorded decalogs in the Bible are as follows: The familiar one of Exodus 20:1-17, which is commonly taught in Sunday schools, or at least it was there taught 60 years

ago, and which is repeated with slight changes of order and phraseology in Deuteronomy 5:6-21, and the less familiar one in Exodus 34:14-26.

The decalog in Exodus 20 in abbreviated form is as follows:

Preface. "I am the Lord thy God, which have brought thee out of the land of Egypt, out of the house of bondage."

- I. "Thou shalt have no other gods before me.
- II. "Thou shalt not make unto thee any graven image . . .
- III. "Thou shalt not take the name of the Lord thy God in vain . . .
- IV. "Remember the sabbath day, to keep it holy . . .
- V. "Honour thy father and thy mother . . .
- VI. "Thou shalt not kill . . .
- VII. "Thou shalt not commit adultery.
- VIII. "Thou shalt not steal.
- IX. "Thou shalt not bear false witness against thy neighbor.
- X. "Thou shalt not covet thy neighbor's house, thou shalt not covet thy neighbor's wife . . . or anything that is thy neighbor's."

The one I learned mentioned the neighbor's donkey.

Getting down to cases in the study of his teachings let us examine these Ten Commandments. The first commandment says: "Thou shalt have no other God before me. For I am the Lord thy God, a jealous God, visiting the iniquity of the fathers upon the children unto the third and fourth generation." From that we are asked to conclude that God is good. If God was a jealous God it explains everything. Figured in terms of human relations jealousy and goodness are mutually exclusive. Jealousy in humans has for its basis hate and sex. The affliction is incurable. It is very

obvious that they paid no attention to VI and VII.

That the sins of the parents should be visited on unborn generations spells neither goodness nor justice. I had the migraine most of my life, a hereditary disease. Most of my life I suffered the tortures of the damned for a day or two each week. Can I suppose some one of my ancestors did something naughty, zam—here goes the migraine for little Arthur. On the contrary, look at Gregor Mendel, a simple parish priest, who discovered the laws of heredity. Just marry a wholly different strain and in the children there will be no more migraine headaches. To whom should one sing praises, God or Mendel?

The first three commandments express the same idea and are expressions of jealousy. Why He should be jealous of the poor saps He created is a mystery. The sixth applied only to members of Moses' own tribe. The seventh bears out my contention that the unmarried ladies he saved from slaughter were desired only as cooks. The ninth applied only to his own people and obviously did not include us. The last likewise only had local application and is the basis for the only recognized cause for divorce. Only the fifth, "Honor thy father and thy mother" rises to a higher plane and that sentiment was better expressed by the Egyptians more than a thousand years before.

"Thou shalt not kill". That is unequivocal in most people's language, not so to Moses. To him it meant one must not kill a fellow tribesman. This is made evident when we recall that he said God told him to kill all of a neighboring tribe, except the virgins and the children. The tenth commandment says one must not "covet" the lady across the alley. Why did Moses covet all the virgins of the other tribes and lay the blame on God? Really it was the Yahweh in his original meaning who was talking.

Why the Sabbath is holy is not clear. Every student

of mythology knows that the number seven was a sort of fetish derived from no one knows where. Moses needed it in his scheme so he moved it into his Story of Creation. It was not an unmitigated good. See what the Puritans did to small boys who cracked nuts on Sunday. That is to say the "cracked nuts" who ran things cracked small boys on the head who cracked nuts. It did instill in them the need of keeping the Sabbath holy and the "nuts" whole.

The idea of periods of rest forms a commendable hygienic point of view and is applicable to everybody except the family doctor and the public utilities who likewise minister to the public. Let those people break the Sabbath—and go to hell. Without any apparent reason that holy day has slipped. The gas engine put the final finger on the holiness thereof. The old Model-T did more than the Commandments to secure a day of rest, but not quiet.

Even so for most persons there is something worth while besides toil. Sunday is being restored to a day of rest. Mother and the children go to church in the morning while father plays golf and in the afternoon they all go out to the wide open spaces, commune with nature and nature's God and strew cartons and tin cans over someone's cherished landscape, and despoil the bushes, thus giving a slight obeisance to the devil. It is said one cannot serve both God and Mammon but one can come close to it by planned division of labor between father and mother, thus united they serve.

Generally speaking it must be admitted that some folks need a day's rest. Few people work hard enough to require it and then chiefly the need is in proportion to whether they are bored with their job and have a constitutional aversion to toil. Those whose work is important should not be interfered with, if they have an urge to follow their religion of toil. Who

is it that makes it necessary for the doctor to work on Sunday—the drunk and the glutton and the joy rider. I complained to a minister once and he said there is written justification for some work on Sunday; if your ox falls into the ditch on Sunday it is all right to pull him out. It is the doctor's duty to soothe the drunk's headache even though one knows he plans to take on a new one next Saturday night.

The less familiar Ten Commandments of Exodus 34 may be abbreviated as follows:

- I. "Thou shalt worship no other god;
- II. "Thou shalt make thee no molten gods.
- III. "The feast of unleavened bread shalt thou keep . . .
- IV. "All that openeth the matrix is mine . . .
(that is, every first-born;)
- V. "Six days shalt thou work, but on the seventh day thou shalt rest . . .
- VI. "Thou shalt observe the feast of weeks, of the first fruits of the harvest, and the feast of in-gathering at the year's end . . .
- VII. "Thou shalt not offer the blood of my sacrifice with leaven . . .
- VIII. "Neither shall the sacrifice of the feast of the passover be left unto the morning . . .
- IX. "The first of the first-fruits of thy land thou shalt bring unto the house of the Lord thy God.
- X. "Thou shalt not seethe a kid in his mother's milk" . . .

This version of the decalog is even more confusing than the first. The impressive thing is the nature of the prohibitions except the fifth. Taken on its face value of the first half—"Six days shalt thou work"—is the most disregarded of them all because many do not labor even one day. My father used to emphasize

the fact that the commandment was just as emphatic that one work six days as that he rest on the seventh. The last half is the most enthusiastically obeyed, for a long time was civil law. Even today farmers let hay rot when it could be saved by hauling it in on Sunday. That is not civil law now but what will the neighbors say restrains them, particularly those who work nary a single day.

On the whole the Commandments are predominantly selfish. One is almost persuaded to believe Bacchus did write them for Moses, as some allege, certainly the two parties had the same view of life. If anyone wants to test the action of his heart let him look up what is meant by seething the kid in its mother's milk.

We can say of the origin of the Ten Commandments what Compton says of the resurrection of Jesus: it seemed reasonable to the people of that day but wholly unacceptable today. If we can believe God dictated them to Moses they have been much revised. Evidently subsequent writers thought God did not know what he was talking about when he wrote the tablets. Why two versions? When Moses got mad and broke the tablets did God send him another set?

Hammurabi had a greater claim as the ancient law giver. He undoubtedly has the claim to priority because his stones have been discovered. The interesting difference is he admitted he made them himself. If Moses had not got mad and broken his up we might hope that some day somebody might dig them up. Since they were written with God's finger, we might get a fingerprint and the FBI boys could tell us all about it. Then likely Moses' fingerprints might be on them too. Then we could tell if they were really but one and that Moses just used his double to hide behind.

V

It is impossible to fit the Ten Commandments into the moral code of today. They are selfish and unmoral to the core. Nothing shows more clearly how unfit Moses was to write the rules of conduct suitable for today, yet we accept them, in theory at least. We do wrong in presenting them to the children and requiring them to commit them to memory and ask them to believe that *their* God wrote them. There is but a single noble thought worthy of repeating. Perhaps in the early day they had their value, because there was something to restrain—"Don't covet—go get your own" was the idea. It would seem some practical minded person would say that our interpretation is wrong. It was not ladies we are not to covet but cabbages. Therefore do not covet your neighbor's cabbages, go plant your own and you'll have some. In the words of today, plant a victory garden. At least when the revisionists were at work one wonders why they did not discard both of them and adopt Buddha's or at least agree on which one to present.

As a moral code Deuteronomy was more useful to the people of that day. It also contains much pertinent advice. "If you see among the captives a beautiful woman and desire her to wife, bring her home and shave her head, put on raiment and after a month she is thy wife. If she turns out not as expected, turn her loose but do not sell her for money." Incidentally who wants to know what the shaving of the head signified? Don't look it up, it isn't nice. Here is a noteworthy prohibition: "The woman shall not wear that which pertaineth to a man." No slacks in those days. Here is one even worse: "If a damsel cannot qualify as a virgin and the newly wed finds it out, he shall take her back to her father's house and the men of the city shall stone her with stones that she die." Here is a bit of injustice. "If a man commit rape and the lady

crieth not out, both shall be stoned." That is something to be remembered. But it is a bit complicated. Under some circumstances just give the girls' papa 50 shekels and it will be all right. That is better than being stoned to death if one had the money. It is forbidden to bring a lady who is not nice into the house if she is a daughter of Israel. There are other prohibitions about immodest women which should not be introduced into a coed institution.

Some Benjamites got so shy of virgins that they were allowed to go to a neighboring tribe that was not even Hebrew and swipe themselves some. The constant insistence that gentlemen select only single ladies for their girl friends makes us doctors think that they really knew a lot more about hygiene than they are given credit for. Army surgeons right today are doing their best to impress this Mosaic idea.

Paternal love in that day was not restrained by the white slave law. If a man sell his daughter and she please not her master, then shall he let her be divorced and he shall not sell her to a strange person. Sure, if she please not her master, she is of no use to him. If a man takes on a spare wife, she shall perform the same as a regular one. If a man smite another on the head with a rock and he is put to bed the smiter must pay the smitee's wages for the time lost. If a man smite his servant or a maid and he or she die the smiter is to be punished, but if death does not take place within two days, it does not count. If a man steal an ox and he is apprehended the thief must pay five oxen but if he be killed the transaction is registered no dice. If a man is caught with a live ox, or an ass, or a sheep in his hands, the thief must give them back to the owner. If a man borrows his neighbor's lawnmower and it rusts he must buy the owner a new one. "If you afflict any widow or fatherless child and they cry I will kill with the sword," and the man

killed will leave all his widows and his children fatherless." There are many other items but they are not nice to print.

However besides looking after the proper technic of managing the ladies there was time enough to kill. The commandment "Thou shalt not kill" sounds fine when we read it but that episode of killing off the Midianites (Numbers 31) lowers Moses in our minds as a moral teacher. It staggers imagination to think what Moses could have accomplished had he had Hitler's army. Perhaps that is where the Fuehrer got the idea that he is or was inspired.

This is only a part. The majority of the laws have to do with how to deal with the ladies. The technic of today is a great improvement over those inspired laws. However, far be it from me to imply that the lads and ladies of today are not inspired. Were it not so the road houses would be obliged to close. That is just hearsay I hasten to add, there were none fifty years ago, just a horse and buggy was available.

We would be better off without Moses' decalogs because they have not been superseded by a vastly superior code of ethics developed by the gradual evolution of the average man. Let anyone write his own decalog and it will be quite superior. Anyone doubting this statement, let him read aloud to his family, Sunday-school class or to high school students beginning at Exodus, Chapter 21 on. They are the laws of Moses but it seems to be the Lord who is doing the talking.

We must ask where did Moses get all the ideas he quotes God as having said. He heard a voice. The most certain sign of a disordered mind, recognized by all psychiatrists, is the hearing of voices. To hear voices is evidence of a disordered mind but to *say* you hear voices may be but a matter of shrewd politics as one notes when each candidate states he becomes such only on the urgent request of friends.

It is interesting to note that any institution for the insane today has a number of persons who talk exactly as Moses did. I know one man who declares he is Moses in person. When asked by an institution doctor if he could part the Red Sea he declared most emphatically that he could. When asked to give a demonstration in an adjacent river he greeted the suggestion with raucous laughter stating that there was nobody who wanted to cross. If there was, he could use the bridge.

It is difficult to avoid the question as to whether or not those who preach Moses believe these teachings or do they continue to do so for the reason that the code of the church demands it. Certainly in this day of intellectual enlightenment and ethical development the teaching of these things, even in poetry, is pernicious, reprehensible, tending to prolong the cruelty of a bygone age, except the age is not bygone and can't be so long as we believe the God Moses built for us is good, kind and merciful.

But here is a painful fact which we cannot ignore though we may suppress it, as everybody does. Nearly all major religions had their beginnings in this mental state of hearing voices. That is, they say they heard voices but a close study of circumstances compels us to reach other conclusions. We have them right down to date. Most of them have a phallic background, which is even more distressing.

VI

It is a strange thing that many religions thus begun develop into a high ethical plane later on thus making it possible and legitimate to ignore the beginning. But we must not forget this when we try to figure out religion in the abstract. How does this happen? One might say that people develop morally and ethically beyond their religion, at least beyond the beginnings

of their religion but at the last analysis we discover that individuals, individually or collectively, build a religion more noble than the teaching of the church. Let anyone study the origin of his own church and he will discover that he has builded for himself a better one. Most religions are but a repetition of Moses' enterprise. They rise up, flourish and disappear. There may have been a number of Moses operative during my lifetime. One needs only to read the history of religions to find many more instances. One may wail that if a good God had made religion, he would have made a decent one to begin with. The religion of Moses is the only one that has endured, however.

There was available some outside help. Confucius and Buddha tried to show that cruelties, immoralities and peculiarities of the primitive religions were only obstructing things. To them it was not due to any revelation. They said it was conscience working in the interest of civilized humanity. It would seem that here more clearly than elsewhere in history we can say that is the very element out of which ultimate reality is made, that the mind of man converts out of the universe a God, just and infinite, a language without words, we call it spirit, a word we use to indicate that it is beyond us. The laws of this God the scientist tries to understand, not only to make them harmless but to put them to work, for instance, lightning, a danger; electricity a good servant. How Benjamin Franklin coaxed the truth out of the clouds is the most thrilling story we can tell the children. From a kite to the radio! Indeed "Nature is the art of God" was said so well by Sir Thomas Brown in *Religio Medici* in 1642.

The laws of Moses came from the Babylonians. The Egyptian priests long before had taught that there was only one god. Centuries later the Yahweh of the He-

brews superseded the Golden Calf and the sacred stones. The improvement was in name only because it was too plain what the Golden Calf and the sacred stones signified. Their God was a war god and furnished the sword for David when he went on his depredations. Now we are spending the resources of the nation, and are sacrificing countless young men to combat that idea. Suppose it had been recognized that the idea was not of God but of Moses and had suppressed it. It could have been done more cheaply then.

As I have contended in a previous chapter, Man's noblest sentiments are developed within himself, the still small voice of conscience. I believe that the ethical development of the average church member is higher than the church with which he is affiliated. I dare say if it were put to a vote there would be few requests for sermons to be preached from Old Testament texts. Most certainly none by those who have informed themselves of the meaning and source of those inspired ones. If anyone cares to inquire among his friends I believe he will come to the same conclusion. Moses' God was not good and listening to the Old Testament presentation of unmorality and bloodshed throughout the years prepares us to accept the world at its worst as we find it today. It is impossible to achieve a noble height by following such leadership. We have a right to insist on concrete evidence that the God of Moses is good.

The first step in the study of any problem is to realize our ignorance. The teaching of Moses has proved itself a futile remedy for the world at war. There the mere fact that seekers after truth were formerly condemned to the stake is evidence enough that for many centuries men realized that the teachings of Moses were false. They felt that its teachings would

not bear investigation. Question one thing about religion and churchmen collectively get mad and brand the skeptic as an atheist. Churchmen knew then and know today that their teachings will not stand the examination of intelligent men. The best proof is that once they have grown up few will accept the teachings. Only children can be impressed with the religion of Moses, poor kids, also of course those who remain children through education. Some of the most ardent defenders of the faith are men of high intellect. Taught to believe in childhood, plus an added hate as they develop, many have the ridiculous attitude of fanatics. These are the real pillars. These stem from childhood. Men of like intelligence not so imbued in childhood remain impervious to the pleas of the faith. The point should be kept clearly in mind when we think of education for the church and compare it with education for death as we now see it in operation. Only this fact explains how it has come about that the teaching of Moses has endured all these centuries. Only education for ignorance can explain it. In the face of all the evidence which has been developed by science it should have, one would think, been blasted out centuries ago. It will be as soon as children are educated for life, not for the church.

In the study of the influence of religion of Moses on mankind we must go back again and study the history of the primitive races. The study of mysticism is imperative because our religion is still resting on the mystic beliefs of primitive people. It requires the genius of Moses to give it the acme of hate, lust and murder. The reason the teachings of Moses still endure is that lust and its handmaiden hate still taste good to many modern palates. Murder is only a spill-over when lust is frustrated. I know whereof I speak. I once wrote a book, the Doctor and His Patients, out

of my observations as a doctor setting forth the consequences of lust. It was condemned in some quarters because it was counter to the teachings of the Bible which says that is all right. I attempted to show that sex, a necessary thing, can be restrained until it reaches the noble love of mother and child, or it can be cultivated to the depths of lust. I knew the cost of holding up the mirror of truth to lust would call forth resentment in those who revel in lust. Nothing could show more clearly that those who so indulge suffer some pangs of conscience as they view their own cussedness. Drunkards are not enthusiastic students of prohibition tracts, unless it be for a few hours following the last debauch.

It is unfortunate that Moses should have selected the worst possible brand of mysticism, otherwise a war of extermination would never have afflicted mankind. The seed planted finally has born the fruit of its kind. Had the jawbone of an ass remained the most lethal weapon it would not be so bad. We enter the plea for Moses that in all his wisdom and the wisdom of his God he did not foresee development of the human mind working on its own power, or on power derived from other sources, to wit, inspiration. The intellectual achievements of mankind would be all to our benefit if we had not dragged along with us the teachings of a semi-savage age.

From the foregoing it may appear that I bear an animosity, ill feeling, hostility, antagonism, repugnance, and some less polite sentiments against Moses. In self-defense I may say that these sentiments were developed in the impressionable years of my childhood and it is impossible for me to divest myself of them because they are being constantly paraded before me.

The saddest day in anyone's life is when he must bury his ideal in the bitterness of his own heart. My

ideal was born in a Christian home. My parents were kind. A good God reigned over us, I was told. Naturally I compared him with my parents. All one had to do was one's best and God would see to it that all was right.

VII

There came another discordant note. The clergy of that day, sixty years ago, talked of a good God and a loving Father. But what I heard of the doings of this good God was that he provided fire and brimstone, the tortures of hell for little boys who did not love God. Jesus, his son, born in Galilee died the indescribable death on the cross appealing to his Father, the good God, to save him. Jesus taught his Father was good but we are compelled to believe he was mistaken. There is no more pathetic cry in all human history.

The God who is all powerful we were told could have saved his Son if he so willed but the world was made up of bad little boys like me and his Son must die on the cross to save us. That was a very perplexing problem. He could do anything. He could just as well have made little boys good, could have made a sinless world so that the sacrifice of his own begotten Son would not have been necessary.

I was relieved when I discovered that there is history of sixteen other Jesuses crucified to save the world. It was a habit of the times to picture something startling just like when a person became noted or notorious it was discovered that he was sired by some mysterious source. This leaves us clearly with Jesus as a noble concept born in the human heart just at it was in Egypt and is a recognition of the fact that a person may do better than expected. Biologists have made immaculate conception unacceptable so we discover that the famous one learned his catechism and was baptized

in his childhood and all his subsequent achievements are to be ascribed to the influence of the church, as I shall duly discuss more fully in a subsequent chapter.

I have been searching many years for evidence that God is good. Ask any learned minister what evidence there is that God is good, he'll quote you some passage in which the word is used without, however, offering any substantiating evidence. The only person who has met the question is, of all persons, a physicist: Compton. He concludes that it is to be found in the fact that God gave us intelligence enough to make ourselves better. I know all about that type of goodness. "Lick the kids and learn them" was the diet on which I was nurtured but somehow I cannot bubble over with affection when I recall them, the old brutes. In reply to his question "Where is God's mercy?" he thinks it is very real but it is to be found in the psychological rather than in the physical realm. My own problem then is to forget the lickings I absorbed and concentrate on the fact that I have found many noble and beautiful things in the world. This teaching certainly gave me a wide margin for improvement. I am compelled to conclude that if you want a good and merciful God you will need to build yourself one out of your own mind, out of the love of your family, out of the beauties of nature, out of the notes of lofty music, or out of your studies in science.

I learned the Lord's prayer. All I could make out was that we were asking for some things to eat. I knew where the food came from. I helped to milk the cows, dig potatoes, rode on the wagon when Dad shucked the corn and went along to the mill when it was ground, helped mother stomp the sauerkraut and stirred the applebutter. What was the food we were asking for? Father at the table thanked God for the food before us. He did not ask for it, he worked for it. That made sense.

I learned the Ten Commandments. They were just words to me but when it came to advising folks not to covet their neighbor's wives it puzzled me. Mother was father's wife I knew and if anyone was going to covet her my dog and I would make plenty of trouble before God ever got a chance at him. Our pioneer neighbors were all nice men, like my Dad, and treated other childrens' mothers fine. A prospective coveter was not in sight so I called off the dog.

I relate these things not to air the troubles of my childhood but to plead most earnestly that one should be sure there is no harm done before one inflicts those teachings on the children today. I need only plead for the children because adults not so taught in their lisping years will have none of it.

The thought of Moses gives me even today a peculiar feeling. Reading Judges and Leviticus I feel that to sin properly is a very technical process if one is going to do it according to the rules laid down by the Great Lawgiver. In a number of places women are referred to as virtuous, for instance Ruth, but the whole episode does not suggest virtue. Worthiness may mean a status that is satisfactory to the appraiser. Virtue is not mentioned in the Old Testament so evidently it is not a sin to be virtuous but one does get the impression that it would have been regarded as a mistake and possibly would have been classed as a sin of omission had they conceived of the possibility of omitting anything.

But Moses cannot be blamed for all of our troubles. He did not invent hell. He demonstrated it without naming it. Like sex it came to him by instinct. When the profane speak of raising hell they refer to how Moses brought it on earth. Through improved transportation and other technical achievements we have improved on the degree of hell we can raise but we

do not do it any more enthusiastically than the prophets did. This includes war.

VIII

But except in spots the world has moved. Except for certain purposes, the ecclesiastic, hell has ceased to be. At least it no longer scares anyone. Possibly it still is an economic asset, possibly it has an ethical import in limited circles in early years. The rise and fall of hell would make a fine subject for some graduate student's thesis, something after the pattern of Gibbon's *Rise and Fall of the Roman Empire*, in fact Gibbon's books would furnish much important data. In fact he explains in detail the technic the Romans employed.

But let us give Moses his due. Potter states it thus: "The remarkable thing about Moses' work is the fact that, by his earnestness, patience, perseverance and ingenuity, he brought a race so far on the road of religious evolution in so short a time, from the shades of animistic polytheism to at least the dawn of monotheism, in one lifetime." This he did but his God was based on mysticism and has remained so but what kind of monotheism did he provide? It served its purpose for the time it is true but it leaves us with the feeling of the need of a God freed from the mysticism. The Egyptians showed that it is possible to build a better one out of man's own conscience, this fact cannot be repeated too often. Everyone's God is as noble as he can make him.

To offset this glowing service Moses rendered, he left much to muddy the waters; the burning bush has excited endless controversy. It is an example of theophany which is said to be an emotion excited by the contemplation of God. Potter has this to say: "Moses was wrestling with a personal problem. His conscience was contrasting his present peaceful pastoral existence with the troubles of his fellow Israelites in Egypt. It is

worth noting that all three of the accounts of the burning bush, which a later editor wove into one but which we can disentangle, mention that Moses was moved by the suffering of the Egyptian exiles. Like every theophany, particularly like Paul's on the Damascus Road, Moses unconsciously personified his pleading conscience into the very voice of God." One wonders if the good Bishop knew he was telling us where Moses got his God and Paul his Christ. Theophany means that there is something wrong with the person's brain, that he is suffering from delusions of hearing, the surest evidence of a disordered mind. Disordered minds formed the basis on which we plan our lives, or better said which have planned our lives.

The student of comparative religion cannot fail to remark the significance of several of the connecting circumstances of Moses' inspiration. It was in a sacred locality that the call came. It was also a lonely spot where the theophany occurred. The feeling of awe is frequently the beginning of religion, something like the feeling one has after a visit to Aunt Mary and listening to the tales of ghosts and is compelled to pass a cemetery on the way home. It is also significant that it was in a bush that God made his appearance to Moses. Many people have believed that God dwells in trees, groves and shrubs. The incandescent bush and a divine call to a mission together with the fact that the bush was not consumed, is another common element in religion, the idea of everlastingness, of the Eternal God.

Moses cannot be held responsible for the entire Old Testament, only the worst part of it. He claimed all the credit, consequently he must take the blame for all that misfired. It is like that in a clinic. The chief surgeon is elected by the unanimity of one vote. If one of the assistants leaves some of his tools inside the

patient, the chief of the clinic is sued for malpractice and the assistant does not even get honorable mention from the attorney for the plaintiff. As a recompense the chief gets credit for all the good work the assistants do and it is all right that he should assume the blame.

Moses, or some of the other inspired parties is credited also with producing noble literature and lofty poetry. It is all a matter of taste. No wonder they wrote so much poetry, poetry is supposed to be the medium for the expression of love. It is slanderous to mention this here because the idea those people had of what love was naturally gave expression to the kind of poetry they wrote. I admit there are some beautiful passages in the Old Testament because a friend tells me so, but to reach them one must wade through a lot of slush; trouble is one never knows when he will run into passages which make even an old doctor blush, unless he has hardening of the arteries. Beautiful literature is so much more easily accessible in such an infinite number of other books that one has small stomach to walk past a mess of concubines in order to find it. At any rate other poetic works should be recommended to the young folks.

If we study the copartners of Moses, the inspired one, we find more difficulties. The Psalms of David are said to be the finest literature in the Bible. Two or three of the bloody psalms it is admitted David wrote. The remainder we are told were written by regular poets but it must be realized that the poems were such that they could not have made the pages of a modern small town weekly.

David was the source of great trouble in my boyhood. A minister vehemently declared David was all right and it would be too bad if any little boy "changed even a dot or iota" of his writings, I did not

know what an iota was but I was not going to fool with such a mystery. It is interesting that what was once gospel truth later is discovered to be poetry, or parable, fable, or something. Now ministerial friends are sending me books in which authors write biblical things as bedtime stories. Surely I cannot find fault with these, they say. This fact is significant of two things: that modern clergy realize that the Old Testament is in need of being expurgated to the requirements of today but that one must adhere to it no matter how attenuated and meaningless it may be. These Bible bedtime stories are surely innocuous in their new form. It eliminates all that was impressive in the original. If it were not for admitting past errors it would be easier to do as Abbott did, just call it interesting history about what some funny old fellows did.

IX

Nevertheless many of the events of the Old Testament are still preached about though science has long proved them impossible. These must be examined in order to gain a just perspective. As they preach about Abraham, Isaac and Jacob, why not Edison, Ford and Rockefeller? When ministers take as a text some Old Testament character and deliberately offend the moral sense of the modern child they make a mistake. It is as sensible as if a modern cattleman should wax eloquent about the virtues of the dinosaur as a beef animal and ignore entirely the Hereford breed of cattle now ranging our plains and which as a matter of fact do furnish the Nation's beef. Just imagine a cowman making a speech at a convention on the subject "Dinosaurs as the Beef animal supreme."

In studying the early religions it is necessary to consider briefly unpleasant things. Nobody seems to know the significance of the snake which we meet in the Garden of Eden, and the Tree of Life. I hope no one

will get my meaning when I say I have often wondered why so many of the inspired ones are pictured with bald heads. Don't look it up. Were they spontaneously bald or were their heads shaved to symbolize something or other is the question. I have mentioned the Golden Calf. Reference to these things is necessary in order to gain a better perspective between the relation of sex, hate and religion. All we need mention here however is that the original cross did not have a cross-arm on it, nevertheless in its simpler form countless millions were crucified and are crucifying themselves today. It has been said that Moses by creating his God did away theoretically with totem worship but this is not true and certainly his taboos live after him. One author observes: "We must know about it because it is projected into our very midst today and is the basis of many things we do." We need to consider these things because they form the kernel of all religions based on the God of Moses.

There is one thing that must not be overlooked. Many persons despite Mosaic teachings succeed in making for themselves a religion. They are able to pick out the nobler things while rejecting the rest and add the impulses of their own moral conscience. It is their personality which produces the result and not the teaching. It is only by this process that we have achieved the degree of civilization to which we have attained.

One sees the same process of building nobly on sordid material in every police court. A drunken wife-beater hauled into court for his brutality has a wife who pleads for his release. He is such a fine man when or if he is sober. There are real tragedies. The nobility of her character enables her to visualize her ideal in a life partner which she would like to see in what fate handed her. We see the same mental process when modern ecclesiastics talk about a just and

loving God. Wishful thinking. They wish Moses had made his God as decent as they themselves are.

Considering this we are puzzled with the fundamental fact that we as a nation still adhere to it. Modern society is not running on the Old Testament code of ethics so why is it still so vehemently preached. Associating with the modern ministers one wonders why such fine men emit such terrible things when they get into their pulpits. Death or the cross, blood, hell, damnation, no evidence in fact. The effect of the teaching of such things is apparent when they break through the crust of civilization and burst forth as global war.

Let us imagine what the preachers would be talking about if we just moved away from Moses. Society in fact has done so. One wonders why the ministers do not see the writing on the wall and move out. The idea is frightening at first, as I know from the effect the speech of Lyman Abbott, above noted, had on me and my fellow medical students—grown men of some education. The realization came gradually but now I wish such things were not taught to my grandchildren. In order to escape Moses it seems we must move out of the church.

How we can longer ignore this obvious truth I do not know. We cannot longer look at the teachings of the Old Testament as innocent vagaries useful to amuse the aged, or recommend it to our children as a text-book on moral conduct. It is vital to our own everyday lives to inquire just what would be the loss if it was banished from our literature.

Moses has been and is yet called the Great Law-giver. Yet when one reads the original text he finds the Lord says he led them out of their bondage. Usually Moses is given credit for this stunt. One must realize that if so he led them out of the Egyptian bondage into the bondage of his mythology. Now it seems there is need for someone to lead his people out of that

bondage. Certainly we need to build on a new basis to meet the problems of today. It is stated that the Puritans came to this country so that they could worship according to their own conscience, and compel all others to do the same.

The tragedy of the bondage of this religion is that it has set apart the people who hold these teachings, from the people among whom they dwell, more a problem to themselves than to their environment. I have no need to trace these tragedies because they are constantly the subject of newspaper comment. A recent book "Jews in a Gentile World" by Graeber and Britt is worthy of serious study by both.

I have gone to this length in the attempt to identify Moses and his achievements in order to determine why we are where we are. I occupy a neutral ground and I hope can look at the situation without spleen.

X

We have yet to try to find out why the descendents of Moses are at loggerheads with gentiles. They made the gentiles their religion to date, and still dominate their ethics. This should at least register a smile if not a loud laugh. If anyone is entitled to a grouch it is the gentiles for the joke the Hebrew Boys put over on them.

Why they do not see the humor of it needs investigation. In the first place the Jews took themselves too seriously. They were the chosen people, no doubt the vote was unanimous, because there was no one else voting. This opinion still holds. To retain the self-complacency it is necessary that they remain in groups wherever they live. They forbid intermarriage. The Mennonites had the same idea until my boyhood. The young people settled all that; I helped some.

The first time I heard the name was in Sunday-school when Jews were referred to as "Christ killers."

Naturally they must be a terrible people, I thought. A distinguished bishop, Gilmore, stated not so long ago "for eighteen hundred years the blood of Christ has been on the Jews." There is no evidence that the Jews crucified Jesus. It is contemptible for anyone to give forth such statements. Incidentally it should be noted that the bishop accepts the "Christ-killers" religion. However it is such loose talk which is responsible for more than half of the Christian people bearing this antipathy toward the Jew. If we told the truth we would say it was a Jew who gave the modern Christian his church. Besides there is really no evidence that he ever was crucified. If we feel any enmity against the Jews we should concentrate our spleen on Paul.

Like most religionists the Jews resent any question about their religion. Ask a Methodist why John Wesley said if there were no witches there is no God. Ask a Presbyterian if they still believe in infant damnation, ask a Catholic if there is any evidence that God understands any language but Hebrew, and they all get mad. A scientist cannot understand why it is that a difference of opinion should cause anyone to bubble forth in anger. It would solve a real problem if both peoples really examined the facts in the case and both moved, say over into the Buddha camp. Both peoples have moved a long way from the Mosaic camp and should realize that they are still divided by things that never happened.

The most notable and irritating feature of the Jews today is their industry and efficiency. Nobody likes to take the dust from a rival's heels. Coupled with this is the fact that sometimes they hold five aces in the game of life and when called, arrogantly ask what one is going to do about it. This I believe is the most common complaint, the one most difficult to justify and the most potent cause of antipathy today. That feeling is unwarranted because it is not distinctively

Jewish. The gentile does as much of it as his abilities and industry permit. He has not more morals but less energy.

I have found the Jews the most touchy of all people. Many are on the lookout for something personal. It is too bad that animosity continues to the present time. There is so much of the highest type in the Jewish blood if one could just strain it through a sieve of truth and remove the mythology. If their religion were carefully inspected in the spirit of truth and each article cast off when proved to be absurd at the end of the process he would need to borrow a barrel to wear home. If that were done the gentiles would be divested of their religion at the same time without the need of making a personal confession. At the end the two would be very much alike, as alike as two angels, minus their wings.

I will offer myself as a shining example of what can be done in the rejuvenation of a Jew. The artist Ross publishes a picture of a bust whose profile is an exact counterpart of mine. It is of all people that of Moses. A leopard cannot change his spots, nor a Jew his nose. They both have their points. Even so though one cannot change the shape of his face he can control what is going on in his brain back of it, if he has the help of his ancestors. For 400 years my people have existed outside of the Jewish religion, having adopted the Mennonite creed. My daughter was as typical a Jewess as one would hope to meet. When asked if she was a Jewess, her reply was "Sure, that is why I am so smart," and ended it with a merry laugh. That laugh carried the secret. Don't miss the point; given a bright strain of Jewish blood the religion can be recovered from in a mere 400 years, if one has a sense of humor. My people had a sense of humor and laughed off the religion. I may say in passing that if all Jews were as smart as my people were there

would be no Jewish problem. It is a matter, not of race, but of religion, a religion unchanged since Moses was handed his tablets.

I am thankful for my Jewish blood and thankful to have escaped from the bondage of their mythology and taboos. I enjoy work just as keenly as those who have retained them, and I have escaped from the inevitable hate inseparable from their religion. Only truth will make Jew and Gentile one and it only requires a sense of humor to make the truth plain. It is all very simple, eliminate Moses, his writing and his teachings.

The study of the influence of the teaching of Moses in modern life was never so urgent as it is today. Just how did we get into the fix we are in now? The religion of Jew and Gentile failed us. We trusted sentries who slept while our enemies build armaments. We prayed ourselves into somnolence by mumbling mythology, only to be awakened by the belching of cannon in a global war. Our indifference has caused our boys to sleep in unmarked graves, our girls to live in the unending silence of grief for their sweethearts and silently crying for babies destined never to be born. We have educated our children for death and endless grief.

The mother and her baby is painted on the banner that must lead us to a higher civilization. As an outsider looking on I suggest that we would be better off if the Bible were amputated to the left of Matthew 1:1. Even that should be interpreted in the light of the knowledge and intelligence today. In a subsequent chapter I have undertaken to interpret Luke in the light of medical science today. That is not an expression of conceit but a willingness to make available to modern minds my heritage of two millenniums of the development of medical science. Let other branches of science offer a like service.

The God of Moses has failed all of us. Prayer has

been tried and it has failed and the only new remedy suggested is more and louder prayers. The religion of Moses and the Christianity of Paul aided and abetted by politicians, has led us into a blind alley and we are stranded for the lack of leadership.

There is evidence of restlessness among the clergy. The Protestants seem to have a subconscious feeling that the God of Moses will not serve the advancement we face, yet they follow the advance in civilization languidly beating small drums as they bring up the rear of the procession. Their opponents, the Catholics, with their perfect machine exhibit some restlessness and occasionally exhibit uneasiness because things are not going well, as I shall note further on.

So with the adherence to the mythology of Moses and the supreme babbling of Pauline faith we are left without guidance serviceable to the world today. And so the hour of reckoning has come—the 'teen age boy must be educated for death without any notice whatever. The one weakness, the other misdirected strength—result, death.

XI

In my early years as a country doctor when I became lost on the prairie I retraced my trail until I reached the point of starting. That is, I turned my horse around and trusted him to find the way back. Being a horse he had horse sense and knew the way back. I had intelligence enough to know I had lost my way.

I believe the same technic should be followed now. We are lost. Perhaps our ancestors made a mistake in trying to visualize an anthropomorphic God during the period mistaken as early sensations of civilization but which really were pure mythology. We may go back to the time when people were polytheistic. They saw manifestations of a higher power in everything about them. The sun and the moon thrust themselves on their attention. Then there were the trees and some

animals, even rocks and mountains. Fire was impressive once it was invented. Thunder and lightning were ominous phenomena, all powerful.

It is easy for a scientist to grasp that point of view of the primitive people. In the next chapter I shall present the viewpoint of what is said to be a modern polytheistic naturalist. That is to say one who takes apart the various phenomena of nature, all the branches of science, for concrete study. Yet it is perfectly clear that behind all these variable phenomena is a force wholly incomprehensible. We call it God. This centering on one force perhaps we may call ourselves theists. This makes it possible for each person to create his own God as noble as he can build through a lifetime of effort. Furthermore it provides for a constant growth as civilization advances. Mythology can be relegated to whence it came, to semi-savages.

Which God must we follow, the God of Moses or the God of nature? Who in the last analysis is the atheist? What we all hope to achieve finally is a brotherhood of man when war shall be no more. Only the followers of truth can hope to achieve it. Perhaps we have overlooked an important observation. "No man hath seen God" (John 4:12). Suppose we add to this quotation the word "yet" and bend our efforts to achieve such a vision by following the God of science.

CHAPTER VI

THE GOD OF THE SCIENTIST

I shall begin this chapter, as I ended the last, with the question as to whether or not the greatest minds of today are not more capable of constructing for themselves a God than were the semisavages of Moses' day. Each in his own tongue, the great intellects of today will give way to as great if not greater intellects of tomorrow, at least to those possessed of greater knowledge of the world we live in. If so the God of today will become the God of tomorrow. Civilization has advanced only through the conscience of individuals. Therefore the God of each generation is the product of that generation. Then what is God? It is the expression of the noblest sentiments as revealed in achievement. It is the thing in us that looks upward. I speak of the God of science only because I have lived in the atmosphere of science. Music and art look upward, to a God of their own, always looking upward.

No more difficult problem has been attempted than to define the God of science. Difficult because it will necessitate the plumbing of the innermost soul of man, which to each is his own holy precinct. It is the sum total of all that I shall seek to add up to form a new vision of the possibility of achievement. What we have worshiped in the past has failed us because it was based on ignorance.

I

As a background for this chapter I have traced the genesis of Moses and the achievements of his God in the two previous chapters, to the extent of studying the apocryphal gospels and then reading the pyrotechnics of the higher critics, if they are higher. It was not through lack of knowledge that I painted the God of Moses as favorably as I did. Savage adherence to

truth would have painted a much darker picture. In succeeding chapters I shall present the working of the scientist through the stimulation of his own conscience which adds up to the achievements of medicine today. It is this end result that I wish to compare with the achievements of those who have followed the God of Moses. With this background I am prepared, as well as it is possible for me to prepare, to tell what I know and feel about the God of the Universe as viewed by scientists. Only by seeking a new basis for action can we extricate ourselves from the sheer blind faith in things that never were.

The God of Moses started out in grand style with all the confidence of a new department under the New Deal with a new set of letters. All went well until Galileo established the laws of force and motion which gradually changed the views of thinking men. Milikan has this to say of the transition: "With increasing knowledge, men's ideas of God, the integrating factor in the universe, of course began to change. The days of childlike anthropomorphic conceptions began to draw to a close, and mankind began to move forward to a finer, bigger, more mature, more satisfying conception. A God of caprice and whim began to be replaced by a God who rules through law, a universe which was not worth knowing because it could not be counted upon, began to be replaced by nature which is dependable and to some extent at least understandable, even controllable by man." In other words while science has no place for miracles, it knows its limitations but it is able to resort to such explanations as the scientists have to offer at the moment confident that the unknown will gradually become less and less so.

We must consider in the first place what science has to say about the creation of the universe. There are two schools of thought. The one is that it always

existed, the other places the beginning at a billion billion years ago, based on the diffusion of something or other from something or other. The scientists too can say God created the heavens and the earth, meaning of course that we know nothing of the beginnings and the word *God* connotes the vast unknowable. So it is quite natural that scientists have asked the question: "Is it not possible that the world may really be eternal and self-continuing?" At least we may allow the question to rest there for the present.

For practical purposes we need consider only the beginnings of this earth. It is placed in round numbers at a billion and a half years or more, based on how long it takes to develop lead ore. We know with reasonable certainty that the earth has existed that long, but how much longer we have no conception. This calculation as to beginnings applies only to the earth. Of the age of the universe we have not the remotest conception.

Of course our chief concern is where we came from, if we can for the moment forget where we are going. We are different from plants. That is cheering because we so imitate the cabbages in the way we began; the details are unimportant. The important thing is that we are the product of a Supreme Intelligence working through nature's processes. This give us a God on whom we can base a religion, something on which we can hitch our best efforts with confidence and veneration. However this Intelligence is so incomprehensibly vast that it seems silly to think that it is concerned with the welfare of any particular one of us. The only excuse we can offer for living is what we can add to the sum total of human achievement. Otherwise we can only give back to the soil what we borrowed to make ourselves out of, brothers to the cabbages.

All about us are evidences of reproductive processes

which cause us to suspect that we are but more or less an accident in the process of nature. Nature is so prolific in reproduction that only a small part is expected to survive. If each fish egg produced a fish the ocean would be so occupied by fishes that submarines could not sub themselves. I am therefore one of those eggs which for some reason survived.

Compton still further flattens my ego by noting that man is just one of the insects infesting the crust of one of the minor planets of one of the smaller stars of millions of galaxies and that I am of no significance except to myself, but he takes in all the rest of the human race when he says "What matter even if by mutual consent mankind destroy itself, as for example by a suicidal war? It would be merely the closing act of a side show that is of negligible importance compared with the rest of the great celestial circus."

I present the opinion of these eminent scientists early in the discussion so that the reader may be prepared to follow the line of discussion which is intended to cast a doubt if God created the universe just to put our dinkly little earth in it just to have a place to put a man on it, only to damn him with sin in order to save him from it.

The idea we need to grasp is that we are just a small part of something that is really vast, really so gigantic that when we prate about this war so confidently we wonder if "for the duration" really is from now on or if we are to have a breathing spell between this and the next war or possibly the next after that when the human race will annihilate itself by still further improved technic, or by starvation because the production of food is neglected in the more exciting occupation of killing. More likely than actual physical extermination will be the destruction of all moral concept leaving only from the heritage of the past some intellectual achievements of the scientist. It puts

us in an uncomfortable position when we try to figure out who cares about the outcome of the war. Certainly there is no evidence that the God of Moses has any concern. Experts have cried out for mercy but we received none. It is only a question of armament best equipped to kill. Our boys are able to stem the progress of human cussedness only because science has so equipped them that their efforts are effective. The God of science has saved us, after we pled in vain to the God of Moses. The benefits of science will be eternal. Countless mothers, fathers, wives, sweethearts and children grieve now but the effect of it will be eternal. The only remedy will be to begin anew on another basis. Blinded by faith we all were given over post-paid by a few of our leaders for purposes which are unknown to us. It is a military secret, meaning we can be used more effectually by the politicians if we are kept in ignorance of what they are trying to do. We glibly speak of the duration of war. We mean by that the war will end when mass killing stops but with that the war will not be over. The war will not be over until we find some way of removing the causes of war, be it a question of it or them.

If after a sugarless, coffeeless, meatless supper we sit in a chilly room looking at the hole in the bottom of our shoe we are disposed to wonder to where we are drifting. We are supposed to be thrilled by the deep dulcet tones of our politicians coming apparently from infinity via the radio, giving us the assurance that everything is as planned. It is a new voice reverberating from the mountain. Instead of being told by means of golden tablets we receive the message by radio. Only difference is only the voice is golden. Unless we heed we must go to hell. But we have done better and have made, or allowed to be made, a hell all our own. This tells us where we are at and leaves us with only one question unanswered and this of in-

terest only to us. Why we are where we are, and why we are here, and how do we get back, and when, if we do how we can tell we are back. Fortunately we know why we are where we are if we can just see through the fog that has engulfed us from the beginning of time.

II

It is obvious that the physical, chemical and allied sciences have made it possible to have what we have and are therefore able to protect ourselves from the acts of a medieval philosophy. Having achieved this we hope to have a chance to try again, if we can divest ourselves of things inherited from a semi-savage people.

We have before us proof today of what science is doing in our hour of need. Science has rescued them because they used their heads. It is science that has made it possible for Russia to protect itself, and the rest of us from annihilation while we hastily provided means for our protection which had we heeded the voice of science we would have done at the same time Russia was active. Had we built the planes then which we have now it is safe to say there would have been no war. That we were asleep was obvious but our capacity for action once awakened was overlooked by the opposition. The other fact overlooked was that Russia was not asleep at all.

Medical scientists built no armaments but they have made life free from disease more secure to a degree undreamed of a century ago, lessened death from wounds to a degree that is as astonishing as it is gratifying. So far as medical scientists are concerned it has been wholly altruistic. We have answered the spiritual call of the God of science. Now the sleeping nation awakens to cry to us to do yet more than our share to neutralize the insane cussedness of the world war. We doctors have been so busy saving life that

we did not notice the drift of events calculated to destroy the products of our toil. When the appeal to the God of Moses failed we heard a call for 40,000 of our most intelligent and physically fit of our profession.

We, the common people, had sort of turned our general welfare over to the specialists in human salvation while we slept. That we did sleep no longer admits of discussion. It is a question whether the national intelligence is still so pervaded by the trust in the mythical God of Moses that we are unable to see reality when it faces us.

Thus it comes that it is of concern to the scientists as well as all others how the collateral forces who led us came to bungle the job. This is the reason the scientist has for urging the consideration of a different concept of the Eternal Force, since the dependence of the past has proved pitifully inadequate to produce or even to permit the highest development of the human race.

We are forced to the conclusion that we have allowed ourselves to be dominated by assurance of a protection which never existed, to save ourselves from a mythical hell while a real hell engulfed us. Our old advisers are out on a foul ball caught by the Great Catcher. We gain no satisfaction in the assurance that the batter up thought he really could hit a home run. The hand of the Great Umpire goes up, batter out. If we exterminate ourselves it will be of no concern to the rest of the universe. We are of great importance to ourselves only. So we turn to the God of the scientist who says in effect: "I gave you a bit of brains and if you are fool enough to exterminate yourselves by following a false god it is all right with me. I have plenty of playthings left."

Col. Scott in his book, *God is My Co-pilot*, expresses

the point fully. His co-pilot was the God of science expressed in the laws of physics. He had to go along with the plane and help his God. A pious supplication to the God of Moses by conscientious objectors would have accomplished the deed, so they say. I can say with equal conviction, God is my co-pilot when I pick up my scalpel. He established the laws of wound healing but a few details are left to me.

But even the babblingly complacent do not want to exterminate themselves. They confidently look to the science of medicine, physics and chemistry to save them. They cease their whimpering while the God of science with the help of those of simple faith like Col. Scott and me in our simple faith saved them. The only excuse for saving them is that in saving ourselves they jump on the bandwagon. We must come to the unpleasant realization that their teaching that the Lord looks after the lilies of the field may be all right but they are not lilies, just yellow weeds sapping the moisture from the soil thus hindering the growth of cabbages.

III

Very obviously we must look elsewhere for safe leadership. Mythology having failed we must look for truth as evolved in the human mind. To find this new hope we need go back no farther than Pythagoras. He says if we learn to live according to the laws of nature we will have a fuller and happier life, perhaps also a longer one. Compton adds a word of hope: "This lesson of the need for knowledge of the truth and for the willingness to adjust our lives to this truth is, it seems to me, the great contribution of science to humanity." According to Pythagoras we must live a life of self-discipline, in fact "If man will learn the truth and abide by it, that truth will make him free." That

sounds hopeful but it implies work and the faith that work will serve our end.

But there is one consolation: We do not need to inquire if the God of nature is good, does he have mercy? It tickles me when the ecclesiastics who preach with such confidence about their protecting Force have their moments of perplexity. Bishop Barnes says: "For some unknown reason He permitted death, disease, the instincts which have led to selfishness and lust in man, because He willed that higher moral, intellectual and emotional development which in man is such an unexpected outcome of the process." If the good Bishop expected his God to produce a higher moral, intellectual and emotional development to come out of the process it would indeed be unexpected. Unexpected because according to our present set-up we have no reason to expect anything different. The cause of man's "higher moral, emotional and intellectual life" has been the product of man's own efforts. The Bishop got the wrong number.

This point is clear: When we consider that these came from somewhere, forces so far as we can see that were always operative, and likely will always be, at least so far as we are concerned. We know that if we plant in the ground a specific kind of seed, water the new plant, keep the weeds out, nature will present us with a cabbage. In addition to this labor we know that it is by virtue of a certain well known technical process that there is something that is beyond us, a fermentative process, and we get sauerkraut. Thus the scientist learns that while the most important part is contributed by the processes of nature, it is necessary that he do his part.

Sooner or later after he has labored a lifetime a still small voice will say, out of our hearing, "Earth to earth, dust to dust." Which means that in due time

we will contribute to the nutrition of the soil so that it will grow better cabbages for coming generations. The scientist viewing this process formulates the law of indestructibility of forces. Even though our ego is thoroughly deflated we should be elated to realize nothing ever really dies, but lives again in ways we cannot predict. Even our rotting bodies will add to the fertility of the soil.

The God of Science is reticent as to ultimate ends. After we have contributed to life all that is possible for us to achieve it still leaves something unanswered. All we see is that all living things die and return to the dust from which they sprang, but nature keeps saying that over and over again. The lily of science can say "There will be other lilies living after me." When the scientist thinks of what comes next he comes to think that he doesn't know even what life is. When it goes out he doesn't know what it is that went out. Sure death is the inevitable end of life but he knows less about what it is than he does about life. He knows when life ceases but he does not know what death is, if it is.

But we do know that our God has been around quite a spell of years and likely will be on the job many more, maybe always. We know he is just so we may hope he likes us well enough, because we have raised cabbages, to keep us around to the end of time. And on that possibility, we can base our religion and hope. Hope is a silly word, its synonym is confidence. Here we use the word hope because we have no basis of fact, but we can wish without knowing anything. If we wish hard enough we come to feel that the wish will be realized. So it comes that in the end the scientist just feels there is something beyond.

After all, the most beautiful thing in life is death. I have sat all too many times, at the bedside of the

dying not to know whereof I speak. All is peace there. My mother was an abused stepchild, much sick, constantly fearing death. Yet as she lay dead, her face had a serenity it never had in life. Whence came that serenity as she died which she never knew in life? I do not know. When anyone becomes unconscious in a serious disease he has, so far as his intelligence goes, died. Whether he comes back to life depends on the course of the disease; sometimes, we hope, on the doctor. I have died three times in this sense and only once was there a moment's distress. It was the fleeting question as I felt myself losing consciousness: "Who will take care of Agnes?" That has been decided and the next time there will be a gay response to the inevitable. Not hope, not a wish just a feeling that it cannot be otherwise.

I have this feeling because so far as anyone can see, in a sense, man lives forever. To holler for a future state is futile, silly, but happily wholly unnecessary. It is the fundamental law of nature. Nothing really ever dies, not even, it seems, fool beliefs, they seem too to be immortal, too often immoral.

We scientists know our God expects us to work, rewards us when we hoe cabbages, which is the symbol that all work will be rewarded. There is something to live and strive for. We must strive to live as a matter of fact. For each loafer someone must do the striving for two. That is inevitable, out of nothing, nothing comes. Of that there is no doubt. That is why scientists work on through weary years of toil, only they are not weary, just having fun, inspired by hope and they do not worry about end results. The scientist knows from experience that he is working for a just God and he has confidence that on the ultimate Saturday night he will be paid the wages he has earned, paid on the basis of honest effort expended and not

in achievement. Beyond that it becomes personal and concerns only himself.

I feel sorry for those whose hope of immortality is based only on promise, someone said something. Who said what? Something, like a wet rag, pulled out of mythology. Believe it if you can, you cannot feel a promise. Such an idea of unearned immortality may be useful as a sedative but it fails as a stimulus. It may keep our knees from knocking when we are scared but it does not help us to see away beyond the constellation Andromeda. Speaking of Andromeda, it is just a "twinkle, twinkle, little star" but it is nine hundred and thirty thousand light years away. Figure Alpha Centuri as four light years away which makes it twenty-three trillion miles away. If anyone wants to know what infinity is, there it is. He who tries to comprehend the vastness of the God of science, is just not a scientist. A scientist is just a gatherer of pebbles.

There is one question which may be considered in the concrete. One is asked why is the scientist, from whence came his ideas. "Why did you decide to devote your life to science?" I have been asked many times. Most can point to some event that first suggested investigation but why they continue years without end none can answer. Taking it in general I would say a scientist is an unfortunate individual who is bitten in early life by some bug that produced an incurable itch to search for truth, incurable because like a neurotic he doesn't want to recover. Nowadays of course young persons see scientists at work and imitation may play a part. In times past it was different. Men like Servetus and Galileo got a stimulus from somewhere, where no one knows. Therefore scientists must formulate a God who does those things to them. Of course that is just a familiar word but it connotes the Incomprehensible Universe.

One might say the God of Science is cruel, is as bad as the Bishop's God above noted. "He permitted disease and death" and hits us with lightning, also he created Franklin and his kite and now we have the lightning rod and can laugh when it thunders. We make lightning run our clocks and stomp our sauerkraut. He did not produce lust and selfishness, only whiskers and revelation could accomplish that. He discovered that lust could be cultivated and stimulated by singing songs. The God of science produced death in order that succeeding generations by virtue of the immortality each manifests by his own acts may lead to a nobler life. Why does our God permit disease? Some diseases are the result of the perversion of natural laws. Why are bacteria? They are necessary in many of the processes of nature. If there were no intestinal bacteria we would need to take castor oil instead of coffee for breakfast. Those bacteria we do not like, we exterminate. Pure science has taken bacteria and made them defeat their own end, so that infectious diseases have been all but eliminated from the face of the earth. Save for bacteria we would have no cheese, or acid, or beer.

We learned about the law of expansion of gases and make it run our automobiles. The inspired ones thought its only use was to inflate their stomachs and increase the volume of their songs. On the other hand they did not know that sex had a finer side.

IV

We must now inquire why the God of nature equipped man as he did with an expandable sentiment so that love could by careful cultivation be expended into lust. The lower animals have a moral code we humans have not achieved. His sex life is decent, hence he does not hate, hence he does not cause suffering just for the fun of seeing the agony his acts produce.

Hence he is not faced with the necessity of writing any history of the Dark Ages.

But why did He create man so that he can do these dreadful things? Why did not God create the love of mother and child and stop there. Without lust and its handmaiden hate, there would never have been war. To find out why these things were saddled onto us seems to be the most important problem the scientist has to solve.

It seems our God left us to find out everything for ourselves, just giving us small hints from time to time. Just what starts these hints nobody knows. Sometimes they come by accident as it were. One sees something that suggests something else. That something else comes out of the man himself.

How does a scientist's God talk to him? Whence came his fundamental ideas? Ideas come in three forms which may be presented, a bit facetiously I admit, as follows: First the wheel. It was a deliberately thought out idea. We can imagine primitive man discovering that dragging an object over the ground meant meeting a lot of friction. He chanced to drag it over a round rock which by rolling along lessened the friction as long as the rock remained under the object he was dragging. He got the idea that he would make a hole in the rock so he could take it along. Thus the idea of using a wheel was born, said to have been his greatest achievement as an aid to locomotion. And in due time the idea of the automobile developed.

The next great invention, the lever, was purely a matter of accident. A stick of wood—one end was under an object and rested on another object. He accidentally stepped on the other end and the object flew up, and likely he did ditto, like stepping on Willie's wagon-tongue in the dark. From this dis-

covery of the lever our engineers developed all sorts of contraptions to increase power.

The third type of discovery was wholly inspirational. There is no other accounting for it. This invention was and is pants. At first they were knee length but in time man noticed his big feet and extended the pants down to cover them up. There is no transition between fourteen yards of fine linen and pants. I am only basing my remarks on history if I point out that pants represents the first advance in virtue. They suppress the desire to sing. This leaves the Scotsman unaccounted for. A friend of mine, himself a Scotsman, comes to my rescue. The Scotsman wears kilts, says he, because they are cheaper than pants, and if we can judge by the present garb of ladies, one may even circumvent the need of wearing any if he has the nerve. I have never seen a Scotsman in the act of stooping. In fact I suspect the fear of stooping is what has developed his magnificent dignity.

In summary we have here the three ways of getting an idea, the deliberate thinking out of how to meet a difficulty. The second is the result of accident. Something just happens and the measures underlying it are grasped. The third, there was no apparent need, reason would have ruled against them, no accident could have discovered them, so we must conclude it was an inspiration.

There are an infinite number of instances illustrating events which suggested something else. School children are told Newton was started on his studies by observing the fall of an apple. On the other hand some seem to develop in the subconscious mind. I have noted elsewhere that Banting awakened with the idea of insulin fully formed. Many of the great discoveries came as the result of an illuminating flash to the waking mind. Many others appear to a number of

scientists working independently. Many discoveries are the result of many scientists in succession, like the automobile and airplane, or the shape of gun stocks. Therefore when we come to the individual scientist to learn what we can of what inspired him he likely will modestly say "It was just a hunch" which really expresses his feeling of his relation to his God of science, "He told me."

The muscles in the back of my neck are wearied looking up to admire the doings of great minds. When they soar I just sit down. When Millikan and Compton chase little atoms, and baby electrons around in circles it is just as incomprehensible to me as when Borden Bowne discusses the philosophy of religions. Therefore it must needs be that I confine my remarks to what comes within the range of my own vision. But that is not all a disadvantage. The problems of today are within the grasp of any thinking man. It is not so much a question of how far we have advanced as it is to determine if we are moving in the right direction, and the willingness to be guided by truth step by step.

The scientist has just as much need of a God as the theologian. The scientist's God is unchanging even though just as mysterious as the God of Moses. The scientist has need of uniform laws. He need have no fear that higher critics will question the origin of his laws. No matter how far the scientist travels he knows that he has barely made a start, but the revelations of the God of nature, which he so gingerly dispenses to the scientist for his labors are always along a definite line. The important thing to keep in mind is that is the only means that has enabled mankind to move upward. Nothing comes from without, everything comes from within man himself. If we could only

make this fundamental fact as a part of ourselves it would insure us the greatest liberty yet achieved.

V

There is no science without facts. It is something else when the clergymen talk of applying science to religion. A recent book before me (Footnote: Rev. Eugene F. Marshall, *God's Truth*) starts out with the question "What is the most important of all sciences? The answer is: The science of religion is the most important of all sciences." Such talk is not of science but of logic. According to the rules of logic a cow can jump over the moon but that does not make it scientific. To assume for instance that the Old Boys were inspired, Prophets and all that. Prophets are those who foretold events but what did they foretell—nothing except what could be bolstered up by mythology. To deal with such things as fact is not to arrive at the truth but to conceal it. It is to the populace what a combined rattle and teething ring is to the baby. The baby can shake it and make a racket or he can chew the ring. The combined result is designed to keep his mind off something to eat.

Not all clergymen patronize the rattle factory. President Poteat of Wake Forest College lamented the fact that "religious organizations still think themselves competent to determine in a mass meeting by a majority vote questions which are clearly not within their range of interest and equipment." He adds "as truth becomes a little more manifest, the order of the universe suggests an Infinite Intelligence, its beauty an Infinite Artist." It sounds as if he is asking for a reserved room in the house of the scientists. Clergymen will be welcomed by scientists whenever they start out in search of truth. If we could just keep our eye on the idea of Supreme Intelligence and Beauty, we could

use the same concept of God and start out in an honest effort to learn the truth.

As a matter of fact science has now proven to us that the human race has existed on this earth over a period of years, that estimation of which carries us to the incomprehensible. To worry about the teaching of Christianity which has existed a mere 2,000 years is like taking the artistic efforts of the kindergarten and comparing it with the molecular motion of the physicist or the activity within the cell wall of the biologist. Therefore the scientist seeing a vision of a billion billion years has small patience with revelation which figured in the eons of time was just six o'clock this morning, just before dawn. To muddy the water we hear talk about the conflict of religion and science. It reminds us of the reason for streamlining our automobiles, to lessen our resistance. It is not a question of comparison of several types of automobiles.

While prating about the conflict the church hopefully scans the horizon for some evidence that science may produce something to support its tenets. After failing to subdue science it now asks for its support. We have seen that whenever Christianity looks to scientific proof it has made itself ridiculous by such a discussion. Outside of revelation Christianity has nothing. Revelation is mythology and out of mythology nothing comes and science has no help to offer.

One has small patience when he regards the relation of church to science. After learning the futility of combatting the truths of science the clergy see the luscious pasture on the science side of the fence and would like to share the clover. There have been honest men on both sides of the fence. The churchman anxious to use in his own business such parts of science as will fit in, and the scientist who helps him to fit it in as much as he can. He has plenty and to spare.

We can dismiss with contempt those churchmen who try to bolster their fading cause by falsifying science to force it to conform to their needs. It has as much relation to truth as the testimony in a divorce court, where if truth entered it would spoil the row. Such a book has been a recent contribution.

It is most cheering now to note that some churchmen seek an honest study of the relation of the church and science. That takes nerve. Even in relatively modern times. Lamarck dying deserted and alone, Lyell afraid to publish his *Principles of Geology* because he anticipated theological opposition because it proved that the world was older than Moses said it was. We might mention Faraday and Maxwell. It was only when Edison and Marconi came along that the theologians retreated. Sure scientists will contribute all we can to Christianity, just as soon as someone finds out what it is.

Yet to repeat the slogan, "religion or science," "Moses or Darwin," or "has science displaced religion as religion displaced magic" is silly. Sure there is a borderline which no one understands, an admission no one is more ready to make than the scientist. However we demand a broader view. Christ and Christianity is such a small bit one almost feels he could mount it in balsam and examine it under a microscope. Professor Dinsmore is of this type. He wins our sympathy at the outset: "It has always seemed to me that a man should be willing to face the actualities of life; that he should be eager to know the truth regardless of the effect on his theories. It is foolish to cherish a delusion because it is pleasant. Therefore the spirit of dogmatism, both in science and religion, has been abhorrent to me."

The professor adds: "Working in this spirit of complete consecration to truth, the genuinely scientific

mind attains a conviction of the order, the justice, the vastness of the universe, which in moments of supreme discovery, changes into an ecstasy that is akin to the mystic's vision of God." But this ecstasy is based on or inspired by the truth of science.

The trouble is the churchmen want to follow science only so long as it will not necessitate changing their conclusions. Vincent expressed the situation: "What is so terrible about seeking the truth is that one is in danger of finding it." When they find something that does not fit they ascribe what they want to the Holy Ghost rather than to credit the scientist. Dinsmore speaks of the baptism of the Holy Ghost. I have been trying to find out what the Holy Ghost is without success. So far as I can make out it is what the scientist calls inspiration, something from somewhere we cannot understand. That is not altogether correct because the inspiration of the scientist has never been credited with fecundating properties. Dinsmore speaks of "the vastness of the material universe has given us a glimpse of the greatness of our God." Really I believe what he means is that he has got a glimpse of the God of the universe. He notes that "Science has penetrated the infinitely little, and discovered the Great Artificer, toiling busily in the workshop of the living cell with a display of wisdom as elaborate as he manifests in the largest planet. He is the infinitely small as well as the infinitely large—the ever present God." I believe the discrepancy is explained by some recent Bible students. They have discovered that there is no such thing, it should have been translated *spirit*. The Holy Ghost therefore is something we do not understand which moves us to do something worth while. We hear much talk about the evolution of the Bible. We are told that "the new Bible is immeasurably more human, significant

and real than the first settlers brought to these shores." I have copies of all the Bibles of which I have ever heard and the changes are distressingly little. I suspect it is in the people rather than the Bible where we must seek the change. I have looked far and wide in all the Bibles I possess for evidence of "faith, hope and love" and failed to find it. If these noble sentiments are giving a living meaning in anybody's Bible somebody has played a scurvy trick on me and deleted all this in the copies I have. A learned friend of mind tells me that when any of our ancestors got an idea he wrote it in the Bible. This is comparable to the hunches of the scientists.

When I ask the clergy who said God is good, loves us, and is just, they give me a glassy stare. The only person who has striven to answer the question is Compton, the great physicist. He thinks it is shown in that the Creator of the universe makes it possible to make of ourselves better folks. This indicates clearly that he is talking of the God of science.

There is much talk by ministers of God's love for the anticipation of which we should open our hearts. The love of which they prate is but the handmaiden of hate. That is the only kind of love the clergy can use. Just got to have hate in order to keep in circulation the thousand varieties of creeds. The history of the church bears this out. There was hate before the clergy divided into two main bodies. Their differences look to an outsider like a dog fight. One cannot tell from the sound how much of it is love and how much hate or just the joy of fighting.

VI

I am enheartened when I read that when science demonstrated continuous development that "There were not lacking religious leaders who hailed the ampler interpretation of the orderly ways of the

Creator with enthusiasm." . . . "Let us also never forget that priests and theologians and laymen cannot pass judgment on the seasoned conclusions of science." If such a spirit could become general it would be the greatest event of the ages.

On the other hand we have scientists who have tried to pass the clover of science to members of the cloth. Henry Drummond indicates his view point by the title of his book "Natural Law in the Spiritual World." By the spiritual world he seems to mean the church as custodian of it.

Drummond implies at the outset a sort of suspicion that all is not spirit when he asks "Did that Hand divide the world into two, a cosmos and a chaos, the higher being the chaos?" He really does define the relation of science and the church: "Nature slowly appears to us as one of great unity, until the borders of the spiritual World are reached. There the Law of Continuity ceases, and the harmony breaks down" and then quotes Bushnell describing the spiritual world as "another system of nature incommunicably separate from ours." That seems to me to be the ideal conclusion. The spiritual world is neither the sole property of church or science. Each builds his own concept. Neither of us knows what the spirit is.

Drummond bases his acceptance of "except a man be born again, he cannot enter the kingdom of God" on the belief then held that life can develop out of nonliving substances. This was written before Pasteur disproved spontaneous generation. On the other hand Virchow states: "Whoever recalls to mind the lamentable failure of all the attempts made very recently to discover a decided support for the spontaneous generation in the lower forms of transition from the inorganic to the organic world, will feel it doubly serious to demand that this theory, so utterly discredited,

should be in any way accepted as the basis of all our views of life." Yet Drummond attempts to harmonize many of the statements in the Bible with this mistaken notion of spontaneous generation. One is surprised when he declares himself thusly. Science has demonstrated that what is dead stays dead, and life comes only from life.

One must remember that Drummond was a scientist and preached to laboring men on Sunday, hence should be able to see both sides of the question. It would seem that he was rather discouraged at the result of his preaching when he says: "The hearer never really learns, he only listens. And while truth and knowledge seem to increase, life and character are left in arrear. Such truth, of course and such knowledge, are a mere seeming. Having cost nothing, they come to nothing. The organism acquires a growing immobility, and finally exists in a state of entire intellectual helplessness and inertia. So the parasitic church member, the literal 'adherent', comes not merely to live only within the circle of ideas of his minister, but to be content that his minister has these ideas—like the literary parasite who fancies he knows everything because he has a good library . . . Thus, instead of ministering to the growth of individual members, and very often just in proportion to the superior excellence of the provision made for them by another, does this gigantic system of deputy nutrition tend to destroy development and arrest the genuine culture of the soul. Our churches overflow with members who are mere consumers. Their interest in religion is purely parasitic. Their only spiritual exercise is the automatic one of imbibitation, their clergyman being the faithful Hermit-crab who is to be depended on every Sunday for at least a week's supply . . . And this suggests a second and not less practical evil of a

parasitic piety—that it presents to the world a false conception of the religion of Christ. One notices with a frequency which may well excite alarm that the children of church-going parents often break away as they grow in intelligence, not only from church-connection but from the whole system of family religion . . . In theology truth is propositional—tied up in neat parcels, systematized, and arranged in logical order. The Trinity is an intricate problem. The Supreme Being is discussed in terms of philosophy. The Atonement is a formula which is to be demonstrated like a proposition in Euclid. And Justification is to be worked out as a question of jurisprudence. There is no necessary connection between these doctrines and the life of him who holds them. They make him orthodox, not necessarily righteous. They satisfy the intellect but need not touch the heart. It does not, in short, take a religious man to be a theologian. It simply takes a man with fair reasoning powers.”

The kind of church goers he classes as parasites: “Any principle which secures good to the individual without the expenditure of work is injurious and accompanied by the degeneration and loss of parts.” One can hardly escape the conclusion that his effort to indicate the influence of natural law in the spiritual world has proved, in so far as he is concerned, that it is not applicable to the doings of the church, *at least as it is now*.

Drummond had full sympathy for formal religion but after he had done what he could for religion he felt compelled to present its shortcomings. The most impressive part of his conclusions was regarding the children. He says it scares the children away. It is the children who are of importance, the parents have performed their function in the great scheme of nature and if they are satisfied with just believing, we

may call them blessed. But the children are of the future and any preaching that scares them away certainly misses its goal. The churches' goal.

I heard Drummond give a series of lectures on this subject and a more tremendously earnest man I have never heard. He was anxious to tell the truth. When he was compelled to choose between the God of Moses and the God of nature he found the evidence all on one side. When he had to admit that his effort to bring spirit into the church failed the lines of his face tightened and it had a peculiar glare so that I had an urge to feel his neck to see if he was developing a toxic goiter.

I present Drummond in some detail because we have here the effort of a great mind in full sympathy with the church, to find contact of science and the church. To offer the clover of science to the church it seems would be like trying to feed hay to a billy goat who prefers a diet of oyster cans.

VII

A friend of mine learned in theology and philosophy says I cannot get by with mention of Millikan and Compton and other great scientists. He wants to know when or why the God of science visits a country doctor in a hick town where the Santa Fe merely whistles for the crossing at Main Street as it goes noisily through at ninety miles an hour. The answer is of course that the God of science lends his ear to little voices.

All scientists start with an idea, with a hypothesis. When I say the God of science gives me an inspiration, actually I say to my co-workers "I got a hunch." A small squawk is an imitation of a large one and it is to him equally gratifying. A country doctor who specializes in diseases of the skin and its contents can have just as exciting a life if he collects facts and de-

duces conclusions from them as do eminent men in universities. This shows that the god of science listens to the small voice if it be sincere.

I venture to present a concrete case. In December 1898 I made some slides of a goiter. I noted some funny changes in the staining. This must mean something, I thought—I had a hunch. I showed the slide to Professor Virchow and he said it was something that had not been previously observed, and to follow it up. I have been trying more than forty years up to today to find out what it means. Soon I shall be obliged to mark that “unfinished business.” My God says to me: “You do not know enough to solve a problem like that. I am going to save that for some great physicist or physiological chemist to solve.” But I did find out something, even though I failed to solve the larger problem I was pursuing: the thyroid gland is not essential to the well being of the adult. It is a small squeak but a real squeak, and a small squeak means just as much to a small frog as a big squeak does to a big frog. The God of science is just.

The previous paragraph pictures the pursuit of an idea up hill and down dale, through hope and discouragement, or as Rhodes said—“Never dissatisfied, never satisfied.” On the other hand now comes the pants type of research, the kind that flashed into the mind when there was need. I was faced with a boy with an abscess. All I knew was that all recognized operations for that condition resulted in the patient’s death. Instead of going in from the front, I went in from the back, and the patient recovered. There was no precedent for this operation. My God whispered it to me, it was a hunch, but would have been a fool idea if I had failed. But I have since worked the operation into a principle. You can’t drain pus across an unprotected peritoneum.

Speaking of hunches, let me make it plain. By a hunch a scientist means what an ecclesiastic would call a spiritual inspiration. It is something that flashes into the mind of a scientist but only if he is prepared to understand the message. Grasping the nascent idea the scientist works it out. Sometimes he succeeds. Banting had one which led him to insulin, Klebs had one when he saw diphtheria bacilli which ended in antitoxin and prophylactic injections. God acts that way. He starts out with an idea with one man, then lets a lot of others share in the development. This is easily understood when one compares the rumble seated Model-T and the Lincoln just out of the shop. So far as I know Mr. Ford has not told us how he got started on the creation of the Tin Lizzie. He did say that his idea was to take mother and the kids out in the country on Sunday. It was not an inspiration because it keeps folks from going to church. But it was a hunch carried out by one of the greatest minds in history.

VIII

I write of the God of science as if we had an exclusive right to the God of the universe. I do this only because that is the only viewpoint of which I have personal knowledge. There is sufficient evidence that the God we scientists claim as our own talks a various language. He speaks to musicians, poets and artists or to anyone who in his spirit reaches out to where the infinite force which beckons us resides.

The poets have contributed much in expressing a feeling of immortality quite apart from the orthodox way of acquiring it. I quote a few examples of lofty poetry. Nearly forty years ago my daughter committed to memory Bryant's *Thanatopsis*—I can still hear her voice repeating it:

To him who, in the love of nature
Holds communion with her visible forms,
She speaks a various language: . . . when thoughts
Of the last bitter hour comes like a blight
Over thy spirit, and sad images
Of the stern agony, and shroud, and pall,
And breathless darkness, and the narrow house,
Make thee to shudder, and grow sick at heart,
Go forth under the open sky, and list
To Nature's teachings, while from all around—
Earth and her waters, and the depths of air—
Comes a still voice . . .

How prophetic this was I did not realize. She is now the still small voice. And Wordsworth's "Intimations of Immortality":

To me the meanest flower that grows
Conjures thoughts that often lie too deep for tears . .

It has been well said that the deepest grief knows no tears. And Bryant's "To a Water Fowl":

He who, from zone to zone
Guides through the boundless sky thy certain
flight,
In the long way that I must tread alone
Will lead my steps aright.

It is this faith that makes it possible to write this chapter. Thus does poetry mold one's life. Why, how, nobody knows but it shows that in the final summary the scientist does not know, he only feels.

Though one may be ignorant of the theory of music one is inspired by it. Beethoven's "Glory of God in Nature" does not need words. In fact one is surprised to find there are words:

The heav'ns proclaim Him with ceaseless devotion,
The Eternal's name o'er all is heard.
His praise is echoed by earth and by ocean,
Receive, o man! their god-like word!
Who holds the stars in the firmament glowing?
Who leads the sun in splendor on?
It comes all smiling, its light o'er us throwing,
And hero-like its course it runs.

No one approaches the subject of music with greater diffidence than I. My achievement in this art reached its peak when I learned to play Home Sweet Home on a fiddle and in the process nearly wrecked one. Even so one can appreciate what he cannot emulate. I feel a call to the labors of a new day when I see the rising sun even if I cannot imitate the glories of it. If musicians chide me I shall not complain. Most assuredly the God of science is also the God of music. Like the God of science the God of music sometimes stops at unexpected places. This was impressed on me by an occurrence early in my practice. A young farmer rode into town to tell me his baby was having convulsions and for God's sake to hurry. His horse was exhausted and as I had a fresh team I soon out-distanced him, making the ten miles in less than an hour. When I came within a hundred yards of the house I heard a clear voice coming through the cool still summer night: "Rock of Ages, Cleft for me," the old familiar hymn. A coyote perched on a knoll across a draw was complaining to the family dog about the rationing of chickens. At the sound of the mother's voice he too sat in silence. I stopped my team to listen, only momentarily because of the thought of the convulsed baby awaiting me. I found a weeping mother vainly trying to hold a six month's baby on her lap. "For God's sake, Doctor, hurry." I hastily prepared a bath of hot water and throughout

the night I floated the baby about as I felt it gradually relax. The voice of that little mother kept ringing in my ears—"Rock of Ages"—splash, splash, as I bathed the baby throughout the night.

I felt I was living in the sacred presence of the child Jesus. After some six hours of this bathing the baby completely relaxed and she went quietly to sleep as I laid her in her mother's lap. I gathered up my belongings preparatory to leaving. The mother raised her tear-filled eyes and asked, "Doctor, do you think she will live?" I replied with great dignity, "Little lady, I don't think I know." My reply was a bit bombastic I admit but I wanted to relieve her fears and I had to do something to cover up the emotions surging within me. Doctors sometimes act bombastic to keep from bawling. That scene has lived with me undimmed to this day. I still hear the mother's voice and it sometimes gets mixed into my scientific thinking and I must think twice to realize that the Rock of Ages is the rock on which the God of science rests.

Parental love, beauty, poetry, music, are the elements that enable us to erect for ourselves a religion which calls forth the noblest that is within us and thus we construct for ourselves our own God. To this must be added the ennobling influence of good literature. I have a dear friend who can and does quote Shakespeare from tooth pick to bedtime. He has a peculiar influence on me. He talks to the stars, to a time far and beyond this life. It is a prayer of hope and thanksgiving. I have noted elsewhere the influence on myself, the ennobling value of repeating the words of some great soul. To me the noblest influence in my life was "the damsel Priscilla, the loveliest maiden of Plymouth." I was John Alden in the pantomime and Priscilla was really the loveliest maiden. It has remained to me the symbol of all that is lovely

and noble in womankind. From poetry it is easy to bridge to an even greater influence, music. One is thrilled with the simple sacred songs he heard in his childhood, the organ, the voice of the choir thrills in memory. Were not these poets, these composers inspired? Who told them to say what they did? If it was not conscience, they became conscious of something. They felt the vastness of the universe just as scientists do today. Feeling does not formulate a place, says nothing about the furniture nor the plumbing, just infinity in all that is infinite.

Each of these groups of persons constructed each his own God and through him a *feeling* of a life beyond. It is the expression of something within the individual that comes out through his own effort. It has always seemed strange that after the music, certainly one of the greatest powers for elevating human endeavor any minister has the effrontery to drag out his interpretation of revelation.

Thus it comes no matter what the source of noble stimulus, music, poetry or the lives of noble persons the individual attuned to noble things strives to achieve the best there is in him, that is he builds each for himself his own religion. Contemplating the things that inspired him he knows they will never die. If he loses all thought of himself in an endless endeavor to do his best that is all that matters; it is to him immortality.

Music, like love and sex, at its best takes us to the noblest concepts to which we are attuned. Music of course like the poetry of Solomon may reach the depths of sensuality. Sacred music gives me one chance to use the word *sacred* without reserve. I chide my ministerial friends by telling them I would like to go to church if it were not for the sermons. A great church or a cathedral and music carries one to the stars. But it is not a joke at all; when one hears the soaring tones

of a pipeorgan float gently away and then hear the minister begin "We find our lesson today in the book of something or other" I feel that one descends from the sublime to somewhere else depending on the speaker and the text chosen. How any minister can have the nerve to start to preach as the tones of the organ float away to the God of the universe is beyond me.

The closest tie that binds one to the Eternal Stars is yet to be mentioned and it is written only for those who understand. Henry Haskell in his book (Footnote: This was Cicero, Knopf, 1942) tells so beautifully and understandingly the effect on Cicero of the death of his daughter: "I have lost the one thing that bound me to life" he wrote his friend Atticus, and he was his friend indeed or he never could have penned those words. George Eliot had the sentiment which is a tribute to her great understanding of the human heart for she never had a child of her own:

Oh, may I join the choir invisible
Of those immortal dead who live again
In minds made better by their presence.

It is interesting to note that Sir Oliver Lodge and A. Conan Doyle after the loss of a son took an interest in the occult, a vain attempt to reach the departed in this life. It cannot be done, one would bump into Andromeda on the way.

On the contrary the cruelest line ever penned was by an acquaintance of Cicero: "Why be so distressed by the loss of a frail spirit of a poor girl? If she had not died now, she would have had to die a few years hence, for she was mortal born." Mortal indeed, yet not so to her father. With every daughter who dies a father's heart dies with her, yet he lives on. Therein we find the *feeling* of immortality.

My father a few days before his death, as he handed me a slip of paper indicating the minister whom he wanted to preach his funeral sermon, the text of the sermon, the songs to be sung, and the pallbearers, quietly remarked "when one reaches the end of life but one thing matters—his children; all else of life fades away." The minister had known him for many years and in his sermon he merely quoted father that "life is noble just to the degree that it is made noble." Not a word about salvation. Father felt that nothing noble ever dies.

In my early practice the doctor was physician and nurse. I have seen the nurse develop from the smallest beginning to what she is today. To me the nurse going about her duties is one of the noblest exhibitions of altruism one can see. The most inspiring personalities I know are the pupil night nurses. Often just a slip of a kid scarcely out of high school, spending the long weary nights gliding gently from room to room, or sitting quietly, easing the patient's last hours. To visit a hospital at any hour of the night and be greeted everywhere by an alert nurse who can tell you instantly just what is the status of any particular patient is a picture reserved for us doctors. That is one of the noblest things I know. The greatest of the earth must slide over to make room for her on the seats of the gods.

IX

I have known many great scientists but only as scientists. They are cast in the same mold. Large or small it is the excitement of the pursuit of an idea that urges them on. It has all the thrill of creating something new. William James has well said that scientists create for themselves out of science their own religion.

In illustration of this I wish to add here an account of my relations with three scientists, none of which had religion in the ecclesiastic sense but their worth-

while scientific efforts assured them a place with their God.

One of these, Marshall A. Barber—a more accurate researcher I never knew. We were pals of the same age, ate the same food, smoked the same stogies. From him I learned the importance of checking and rechecking one's own observations, to be the judge of one's own researches, to make sure that they represent the truth. This is the highest goal of the scientist. We never discussed the thing each scientist feels is his own, something quite apart from his science. His religion he makes for himself out of his science he feels is his own concern.

For the purpose of this chapter I recently asked him might I have a look behind his screen. This is what he wrote: "My reply to your letter of February 25 is delayed because I could not quickly recover from the surprise of being thought to be in possession of a worth while opinion as to the nature of God.

"You would be much more fortunate if you could have consulted Abou Ben Makmud on a certain eventful day of his life. According to legend as reward for his goodness Allah allowed him two requests he might choose freely with but one condition, that he select one at sunset that very day, and the other at prayer-time just after sunrise the following day. Pondering long, he chose omniscience for the first, thinking he could not then go wrong on his second choice. The following morning, those going forth to prayer saw Makmud slowly entering the shrine, with head bowed, his step no longer elastic, and terror in his eyes, and heard him request that his former ignorance be restored him. It might have been that Makmud was overwhelmed when all knowledge of the past, present and future came crowding in on him. Before that day he had always believed a few simple prayers, a fast at the appointed month, and saying he believed "Allah

is God and Mohammed is his Prophet" was all that was needed to make him sure of Paradise. The chronicler states that Makmud was never the same after that time. One day he shocked all the people in the temple by asking whether a true Faith was really safer when written in a Book than when simply passed from mouth to mouth and from heart to heart among the people. Would it thus be safer from vital change than when kept in the hands of Priests—perhaps in no other hands for many centuries? It was recorded that no one answered this question, but in the silence one could hear the chanting of the children in the neighboring school as they repeated over and over the words of the Koran." This shows how a scientist, outside of his science, only feels.

I will next mention Professor Hans Virchow. We worked together in the intimate relation of father and son. How intimate the relation was I did not discover until it came time for me to take my leave. He helped me to ascend from the God of Moses to the God of science. Professor Virchow, son of Rudolph Virchow quoted elsewhere, was in the habit of leaving the laboratory every day at three o'clock to attend a concert. He often mentioned the artists he was to hear. One day as he took off his laboratory gown he remarked: "Well, I am going down to talk to the Eternal Stars." When I was about through my two years' work with him he made the plea that I remain in pure science. "No matter how skillful a surgeon you become" he declared, "at best in a few years your patient will be dead. In science you will continue to advance here and there the borders of truth. Truth," he vehemently declared, "lives forever, it alone is eternal." Once when I told him I was going to a concert to be given by a distinguished violinist he said "As an anatomist you will be interested to see how much his arm can be moved while the bow lies stationery on

the string. Technic, nothing but technic, nothing to inspire the soul."

The third, Professor Waldeyer, also was an anatomist. I attended his lectures two hours every day for two years and worked from two to twelve hours in his laboratory. Never a word was said not pertaining to anatomy during all that time. As I took leave I was astonished at his sincere farewell; I'll admit tears came to both our eyes. Two years' daily contact. I liked to work, he liked boys who worked, and quite unbeknown a real bond of affection had sprung up between us, a great scientist and a fledgling.

He said simply: "When you are engaged in the practice of surgery, remember that you were once for two years a student of the First Anatomic Institute. In the practice of surgery you will find outlet for your scientific mind as much as in pure science. In addition you will come into contact with the finest and noblest that there is in human being. You will find there a constant stimulus for greater effort. This will lead you to heights denied us who live always within the walls of our laboratories."

Of the inner man, though I saw him hours every day, I know but little. He once said, "Your noblest bedtime prayer is to take a human bone and recite every point on it, study all its important parts; that will contribute to your skill as a scientist and by so doing will increase your service to your fellowmen."

Once at the beginning of the laboratory course in anatomy, the dissecting room in vulgar language, he said in the most impressive tones I have ever heard: "Gentlemen, you stand in the presence of the dead. In your dissections you perform a sacred service, to enable you better to understand the human body in disease. No word or act of levity will be tolerated in the presence of these your fellow citizens; such a thing will lead to your prompt expulsion."

Waldeyer resigned his teaching position at the age of eighty years declaring he would spend the remainder of his life in research. He died at eighty-two. He ends his autobiography with the following original poem (Because of the impossibility of properly rendering it in English I print both the original and the translation):

The translation is as follows:

Mein Morgenrot	My Morning Glow
Viel Schönes bot.	With charm did flow.
Mein Tag war hell,	My Day I count
Ein Lebenscuell.	A living fount.
Auf Abends Matten	On Evening's meadow
Fiel Dunkler Schatten.	There fell dark shadow.
Nun kommt ganz sacht	Now comes so gently
Die stille Nacht.—	The Silent Night—
Ich Zage nicht:	In confidence I say:
Durch Nacht zum Licht!	Through Night to Light!

Waldeyer's Faith in his God "Through Night to Light" is so like the text my father chose for his funeral sermon "We sow in tears that we may reap in joy!" that it seems a great scientist and a simple farmer expressed the same feeling in the same simple words as they view the setting sun; on their final couch they were equal. Equal in nobility of character, equal in the feeling that death does not end all.

Thus it seems that God is but the concept of the noblest that there is in us; life's purpose is in expressing it. To achieve this end one need not be great but he must be sincere.

CHAPTER VII

JESUS OF NAZARETH VERSUS THE CHRIST OF PAUL

Though the names used in this chapter heading are commonly used interchangeably, even hyphenated, they represent very different concepts. As fundamental principles of life they are antitheses. To understand each, in so far as we can understand them, they must be considered separately. I do not write as a biblical scholar but as one who has seen life intimately. We see the glimmering of the Jesus concept twenty-one hundred years before Galilee, in the Egyptian home. We see the noble precept expressed, five hundred years before Galilee when Confucius formulated the Golden Rule. Buddha and Socrates had the same idea showing it is capable of development within human beings. We may safely say this because it has so developed an infinite number of times and we see it enacted on every hand today. "And as ye would that men should do to you, do ye also to them likewise," (Luke 6:31). But Jesus went further than the Golden Rule when he said in Luke 6:27: "Love your enemies, do good to them which hate you." We look in vain in history for an appreciable development of that admonition.

JESUS OF NAZARETH

Any normal human when he contemplates the life of Jesus is filled with veneration and awe. It is part of his heritage. But the problem is so involved, complicated with lofty thoughts and mysticism. He stands for the finest things in life, the child. "Let the children come unto me," is what fascinates us. It is the most fundamentally important sentence ever spoken or penned. It inspires the spirit of all of us as we behave to our children, and our children's children, living and dead.

I

When we try to unravel that concept from the mythology which surrounds his birth and life all becomes confusion. The Old Testament mythology which created him rejected him and all we know of him is in fact surrounded by this same atmosphere of mystery. We are constantly asking ourselves who said what? Who suppressed the Jesus concept and why? How that one fine idea came out of such a mess of speculation surpasses understanding. Trying to suppress his teachings as a way of life has brought much suffering and it is responsible for the global disaster we see today.

His fundamental teaching is obscured by the statement that salvation is the only end in life. It is foreign to his teaching, yet that is the chief thing that is preached to us. Who said the achievement of personal salvation is the sole end of life? Not Jesus, nor the Jews. He stands for the child, gentleness and love. To see clearly the love for the child is really the important thing. I believe one can get a better hold of the fundamental concept of Jesus if one disregards all the appurtenances associated with his genesis and death. It is a relief to know that the whole picture was builded in convention assembled in 381. The only way I can see to escape the whole mess is to regard the whole picture as allegorical, something written in the hearts of all of us who have ever held a baby. Then one can write in what best meets the dictates of his own conscience.

The Jesus idea exists quite independently of the history of his birth and life. Let it be repeated, the concept of Jesus appeared in the human conscience long before the date 4 B.C. The Egyptians were the first to record the facts which enables us to see. We should hold fast to the fact, for it is a fact, that the Jesus concept was evolved from the Egyptian conscience long

before the religion which created him as he is presented to us. The noblest concept let us repeat was developed in the human mind from a sense of inner urge.

I can say with Millikan that "My own faith in the essentials of Christianity would not be diminished one iota if it would be in some way discovered that no such individual as Jesus ever existed." I would be much relieved if this could come about. I would like to hold the Jesus idea and ideals without the mythology surrounding it as presented in the New Testament and garnished by Paul.

It would be much more beautiful to me if I would be allowed to believe that the Jesus idea sprang up as a still small voice spontaneously in the human heart, without the miracles and the impossible biogenesis surrounding his birth which we are to believe, but is repulsive to my mind as a scientist. It is not something we can believe, we must feel it. It is reborn with each new baby as I have observed hundreds of times as I handed the mother her newborn.

Therefore I repeat I would like to view the Jesus of the New Testament as allegorical divested of all the trappings of the church. And I believe this picture is nearer the truth than that which we are asked to believe. The Jesus ideal looks to the common good, inspiring mankind to do something, not only to believe. The Jesus idea did not arise with Jesus of the New Testament. I look with a sense of joy on the fact that the whole story which surrounds Jesus was repeated many times before the period assigned to him. It indicates that noble feeling is the property of many peoples. This is in line with the mythology which indicates an inherent feeling that there is something beyond.

There is one thing I have never heard explained. Why did the unspeakable vulgarity of the Old Testament stop abruptly with Matthew 1:1. Though the

mysticism continued unabated the spirit of Jesus seems to have banished phallic worship and all that goes with it. But why did Paul spoil the more decent New Testament by reintroducing vulgarity? That was a long time ago when sex ruled, is the only explanation. Why we believe in Paul's teachings surpasses understanding.

The concepts associated with Jesus are hearsay but one likes to believe them for they extend far in advance of anything achieved by any people or race. All great religions express the idea of the Golden Rule differing but slightly in wording. The idea is the important thing. We look in vain for any evidence that the Golden Rule was ever given a practical test. Let it be repeated again everyone must feel that he himself conceived the Jesus idea. Only in this way can he make it a part of himself, the basis of his life conduct.

Millikan says "In three words, I conceive the essential task of religion is 'to develop the conscience, the ideals and the aspirations of mankind.'" His religion is his devotion to his science of physics, as medicine is mine. It has no relation to any church. The church has nothing to do with the development of those three aspirations. The Jesus idea is better off not handicapped with the teaching of the Church as developed in the Old Testament and obscured in the New. Mature minds should not be offended by being asked to believe in the story of the crucifixion of which we know nothing. It makes no difference what happened. All we know is that he was punished.

The idea of the Golden Rule is a man-made concept, therein lies its significance. That and the Jesus concept was the product more or less simultaneously, possibly independently, in many minds just as it is so perpetuated today. What the mind of man has builded he can hope to extend to yet greater heights by his own efforts. To the scientist these concepts link

up with the idea of the God of nature or the universe, all synonymous for some great force that can be depended upon, always consistent, never consorts with the devil, never commits willful mass murder. Step by step the scientist approaches nearer and nearer this just God of Nature as he sees the results of his studies reflected in the benefit to all mankind.

The world has had the Jesus idea for two thousand years yet it has been obscured by the old Mosaic mythology. The time has come when it is necessary to ask what is the influence that has obscured the mother and child from the view of the world. If we regard Jesus as allegorical we will be worshiping an idea, a vision, and our expectations that prayer can be answered by other than our own efforts is disillusioned.

When one studies the alleged teachings of Jesus we face the fact that an honest man may find his perplexities. One reads the Sermon on the Mount, one of the finest writings in literature we are told. Yet if one reads the Gospel of Matthew right through from beginning to end one cannot escape the conclusion that every word was the product of the same pen. If he is not in fact quoting Jesus it is a piece of ghost writing, to use a modern phrase. The whole sermon discourages effort. Our baby tells us to go forth to labor to the best of our ability. All we really know is what someone said he said.

II

In the study of the life of Jesus one must answer many painful questions obscured by the heritage of our childhood. First of all is the question of immaculate conception. The student is confronted by the fact that the same hypothesis was applied to many important personages of that era—after they became important. It came as a reward for unusual achievement. It had no more significance than honorary

LL.D and D.D. degrees have today. To achieve either of those degrees now the recipient may be either noted or notorious, famous or infamous, or both. Immaculate conception in that day was ascribed to persons representing the same wide range of achievement. To cite only two instances, Alexander the Great was sired by Jupiter and Buddha by a star. The story of Jesus as we have it would lead us to believe that his conception by the Holy Ghost was predicted in the Old Testament. The people of that day were anticipating something unusual as in the approach of a storm cloud we are prepared to see lightning to be followed by peals of thunder. But the story of the birth of Jesus was written long after he was dead and was formulated by and for the people already prepared by mythology to apply the unusual phenomena as extra-terrestrial forces. "It is this prepared soil that made it possible for a number of persons in 325 and 381 A.D. to agree on what should be taught about the genesis and crucifixion of Jesus."

Credulity further is needlessly strained by the manner of the presentation of the birth scene of Jesus. I received my first shock when a small boy. The large family Bible contained a picture of a large star leading the three wise men across a pasture. It was so obviously silly—three old men in a stooped position, beards sticking straight out, hurrying across a meadow following a star twice their size. Furthermore the conversation put out by the accompanying angels seemed silly to my child mind. A child may be pardoned if he doubt if an angel ever put forth conversation. When I was asked to believe what the angels said, the first impulse was revulsion. Thus it came about that I was deprived of faith in a Supreme Being in my childhood; I had to rediscover it in my work as a scientist.

The account of the genesis of Jesus states that the

Holy Ghost was the father of Jesus. Recently some scholars in retranslating the Scriptures come to the conclusions that there was no such thing as the Holy Ghost. It should read *a spirit*. That seems to me to be of vast significance. Spirit at once lifts us from the mundane thought of an impossible biologic reproduction to the sphere of the unknowable. If parents could grasp this noble concept it is easy to understand that the spiritual idea of conception may be made so. That would put us in a class above the tomcats. My life as a doctor has shown me in many instances where a child was born in the spirit and yet violated no law of biogenesis.

If it were possible to grasp that exalted idea of the spiritual idea of conception we would more readily be imbued with the idea that the child really isn't ours to give away. That the child is only loaned to us to inspire us to nobler things. If we got the idea firmly fixed in our minds we might then convince the politicians that our children are not theirs to use for political ends. This would be a great advance over the Moses idea. Moses' idea was that children belonged to the rulers, just as it is today. Plow them under, drown them if it seems advantageous, if it is politically expedient. Flanders Field, the place where the poppies grow to save democracy, was made by the plow of the politicians as is the present conquest for liberty. The world cries out today for the democracy of the right of every parent to keep his own baby and the liberty of using the results of his own toil for the benefit of that same baby. The human race has a long way to go before the politician can be convinced that the right to life, liberty and the pursuit of happiness refers to the sacredness of our homes. Until this is achieved hate and war will be a recurring scourge.

Considering the vast advance in science, what do we gain by adhering to the old mythology? Every bit of

teaching which goes counter to the accepted facts of science gives the adolescent mind a handicap in believing anything. Teach him the fertilization of flowers, teach him the simple facts of astronomy, stars hundreds of light years away, figures larger than the national debt, take him to church to listen to the pipe-organ which is talking to the stars, then take him right home again before the minister has a chance to tell that we were all born in sin and that it required the blood of the cross to redeem us. There are many beautiful things connected with the idea of worship but they are obscured by the teaching of events that every intelligent mind knows never happened—even the children.

We cannot escape unpleasant thoughts when we try to find out whence came Jesus. He is the embodiment of gentleness and love. The continued harping about his Jewish ancestry has no point. Who his ancestors were is obscure as we try to unravel the begetting and begotting. One cannot escape the thought that it was a wise child who knew his papa.

We do not know where Jesus came from, no matter whether we regard him as human or allegorical. His origin still is a mystery. Perhaps we may say he was just a chapter in the upward trend of the human race as indicated above. The idea found expression ages before the time of the birth of our Jesus. One cannot escape this conclusion if we look around us and see the elevation of the child in the home, elevation not only of the child but the sense of responsibility of parenthood, the possibility of love without lust, that is the most hopeful sign of the time. That is all we need to know about Jesus.

The love of offspring is a necessary biological instinct. The protection of the young continues as long as needed. The savage mothers love their children. The spirit of Jesus therefore is inherent in the human

race and is existent among those mothers who never heard of the immaculate conception. The most flagrant instances in history in which the rights of the child were denied is recorded in the Old Testament. These inspired personages certainly knew not Jesus, could not use that concept in their business. Imagine if you can a model of Jesus over the door of where Solomon kept his ladies in waiting, waiting if they had to wait.

III

If we search the details of the life of Jesus as given in the Bible we can only increase our confusion. What did he teach? How did Jesus come to public attention? Did he, like Buddha, just find himself and prominence come to him later? Once anyone today reaches a degree of prominence and ventures out to do public speaking he knows how much bosh about himself is related by the toastmaster. Is the picture of Jesus obscured by the enthusiastic statements of his disciples, themselves the product of the old order? Anyone who in an ungarded moment makes a public speech is amazed at breakfast when the papers quote him as saying things he never said, and does not understand. Just imagine waking up many years hence and reading what he is said to have said in that speech. Misconstrued in the first place, it does not improve with the passing years. Would it be sacrilegious to ask if Jesus looking on from the Elysian shore is puzzled by what has been said he said?

How Jesus became an object of public interest we cannot answer. All we know is that uneducated Jews reported his doings. That we must use this today to set our way of life is not acceptable. That they were ignorant of what they were talking about is obvious. We know now that much that is related in the New Testament never happened, just as we know that the sun never stood still in its orbit.

Compare the statements of an ignorant person two millenniums ago with one of the greatest minds of modern times. The findings of science, which no one now ventures to dispute, show the teachings of mythology to have been wrong. In so far as their statements had to do with alleged facts, which have been disproved, it lessens our faith in the truth of their statements, which we cannot disprove. Time has effaced all possibility of scientific examination. The existence of talking angels and snakes with vocal chords cannot be disproved by science. We do know that no such occurrence is mentioned in recorded history. We do know how sound is produced. Spirits and snakes do not have vocal cords, the vibration of which can produce sound.

In Jesus' time the healing of diseases was the chief miracle. All diseases were so cured. Can a congenital deformity be made normal in the flash of an eye? Can a dead body be restored to life? Can epilepsy be cured? Of course after a while they get up and go about their business and it might appear they were cured, but only until it is time for the next attack. Naturally the ignorant when he sees an epileptic get up and walk away may believe he has been cured, he might even pick up his bed and take it with him. In fact we doctors know he better do that very thing because sooner or later he will have another attack and will need it. So it is with all the marvelous cures all down the line.

We doctors gain some comfort by considering the fact that there is no evidence that Jesus performed any miracles or claimed to have done so. On the contrary we are told that the chief reason the Jews repudiated him was because he did not perform miracles enough and so was branded an imposter. This view finds its justification in the fact that numerous persons before Jesus performed exactly the same miracles, according

to legends, or even greater ones like stopping the sun in its orbit.

These "cures" do not worry the modern doctor. The stories certainly place a heavy strain on his credulity. The modern scientist simply does not believe the dead rise. That the dead cell can again reassemble the protoplasmic molecules is against all science. It is more ennobling to the scientist to view the dead cell and say life has gone out of it—life the unknowable has flown.

But what do all these cures have to do with the essential thing which we can understand: "Let the children come unto me." Many an old grandma and grandpa have said the same thing. That is the first thing that comes to any mind when he sees a child. There is nothing to be gained by obscuring the picture by the chatter of the ignorant of a bygone age by relating miracles of the working of which there is no evidence, but scientific proof in abundance that they never happened. Man or allegory makes no difference, let me repeat.

IV

We are interested only in the influence of the Jesus idea on the status in which we now find ourselves. Man or allegory the results are what we seek. We need only to consider two outstanding features:

1) The Jesus idea brings forth the child, a babe. It is our private property and in no sense the property of the State or even the Church. That excites at once the most profound sentiment of which we are capable, the foundation on which civilization must be based, lest we perish. A baby may be born without passion, in love, a lustless love, and in that sense we can' all most heartily believe in immaculate conception. This lofty view, the spiritual view if you like, need in no way be an offense to the biologist. We do not know why the genes in the sperm get busy and we admit it. The unknown and the spiritual are synonymous to the

scientist. That idea of spiritual genesis is applicable whether we regard Jesus as a person or as allegorical. The protection of the child in the home is the business of everyone, against both church and state.

Let us digress for a moment and take a look at the influence of the concept of Jesus above noted would have on our civilization. We must remember that when we hear: "Tramp, Tramp, Tramp The Boys are Marching", it is the cadence of Moses and not of Jesus. The child is no longer at our knee. He is sailing under sealed orders, to end we know not where. It is our child who is marching to enforce the ethics of Moses. That it is necessary now everyone admits but the necessity has come about because in times past we have followed the teachings of Moses ignoring completely the pleading voice of Jesus, "Bring the children unto me." Had we done that it would not be necessary to deliver the boys to the politicians. To where is he marching? In World War I he knew exactly where. He was fighting a war to end war, for the preservation of democracy. We must not only have preserved it but actually incinerated it because he couldn't find it after he got home, it may be said in passing. The boy of today knows that war did not end war. Then why was World War I we ask. It would seem that we should have learned something by that experience. We are vainly trying to find out for what he is now marching. We admit that it is not democracy. No one is optimistic enough to say that it will end wars. But we know why we are fighting; we are fighting to preserve ourselves as a nation against the aggression of a Mosaic philosophy and the Mikado version of the same philosophy. This shows how important the Jesus idea is if we can divest it of the things that never happened. It must be the basis of a permanent peace. We must admit that the human race has advanced very little in the first million years.

We still must protect ourselves from the beasts of the jungles. Appropos is a "poem" quoted by an old Civil War veteran when discussing the cause of the Civil War: "Jesus wept, while Moses slept, and the devil went a fishing." That applies to all wars. It is obvious to all of us now that wanting peace, praying for peace is idle prattle. We must fight for peace as long as the world is as it is. To be willing to accept the peace won by the blood of others is ignoble.

I must emphasize again the importance of grasping the fact that the Jesus concept found birth among many peoples. We should study history which tells us that the Jesus idea was a matter of gradual development. That does not lessen the importance of the biblical story. It received the most definite expression at the time of Jesus. If the idea was not new it shows advancement of the human race by the fact that the idea "took" at a certain period of history which it had never done before. We see the working of this same factor in modern life. We see so often in science an investigator first advancing a theory or a fact for which he gets no credit. The significance of the discovery is overlooked for the time being and not until years later some other person advances the same idea when it at once receives attention. The reason is that the minds of the time are then ripe for the reception of the new idea. The idea of a lustless birth was impossible in the sex ridden atmosphere of the Old Testament. As noted above for some reason the vulgarity ceased with the beginning of the New Testament. Then and not until then was it possible to bring forth the idea of a lustless birth, a child sired by the spirit. It was necessary in that age to dress up the whole scene with mythological trappings, but today we have no need of mythology. Just go study any doctor's case book. Thus the Jesus idea was not born in the New Testament but it was so expressed that it went

marching on. So with scientific facts we can still hope that in the far distant future there may develop a people in whom the Jesus idea will take hold, as a fundamental concept of the family relation, and dominate the world.

2) Unfortunately the same idea Jesus stands for, or is made to stand for, is far less noble, the idea of salvation. That is the central teaching of nearly all cults and creeds. It is the antithesis of the altruistic idea, of life of self for the life of others which this life exemplified. That salvation of self can be made compatible with the child on the mother's knee where everything is sacrificed for the child is a thing that just does not harmonize.

Unfortunately we are without knowledge how we came to link the idea that salvation was to supersede the sense of self-sacrifice and even for the love of the child. All we know is what someone else said Jesus said. My father believed that inasmuch as we really don't know what Jesus said we would do well to concentrate on what he did. Father pointed out that the thought of Jesus was for others, for the children. He sympathized with the sick, that was the central thing. Father waxed eloquent on this point when I told him I intended to enter the medical profession. "Gentleness, kindness, love. That is what stands out in the life of Jesus" he said. "Don't imitate the money changers" he admonished. "The two will not mix. Never refuse anyone your best service no matter whether they have money or not. The consciousness of having done your best will be the greatest reward when you are done." He never mentioned salvation yet no one ever had a greater faith in a future life. Inasmuch as he never mentioned the achievement of salvation by relief I got the idea I had better play safe and seek to earn it just as he did. To feel at the end of life that one has done his best to have earned salvation is more satisfying

than to say one believes that Jesus died in order to save him all that toil.

It seems impossible to find a reason why all ministers keep the theme of prime importance of salvation always in the fore. There are so many things in life that are important, that are of vital interest to all of us that it would seem a variation now and then would suggest itself, things that are now done by outside persons once in a while concerned with problems of living. Young people alone are our concern. The mature are either saved to their own satisfaction, or lost according to the verdict of the "saved ones."

V

I am not an iconoclast. When I inquire how Jesus has fared during the last few millenniums I have more trouble. The child side of him is ignored. In speaking of children he indulged in no figures. One wonders if we are to imply that was to be left in a measure to personal wishes. The more the better is the addition of ecclesiastics, and the apology of those who have already accepted the tomcat as brother.

VI

Most emphatically Jesus has been relegated to the attic for the duration. The nation's anxiety for the salvation of the soul is now submerged to a second place in the wail for the saving of the personal hides. In fact the child idea has been repudiated, sneered at, treated with studied contempt.

We have still more trouble when we try to find out what came of Jesus. Sure enough there he is under his new name of Christ conferred on him by Paul. We do not know why the name was changed. Looks like the word *Jesus* got on Paul's Hebraic nerves, sort of kept reminding him of what his people did to him. At any rate if we are looking for Jesus we must look under Christianity in the index.

We can't even find out what is meant by Christianity. The word *Christianity* does not occur in the Bible and *Christian* only three times. The Jews called the new sect Nazarines (Acts 24:5); anything but any reference to Jesus, the party who taught gentleness and justice. A Christian, strictly speaking, according to Forlong, means one who believes that Jesus of Nazareth was the Jewish Messiah but that does not explain the change of name. Jewish Messiah, what a concept; a hope, a vision of the future. Jesus is the Messiah of everybody who loves a baby.

We have a Jewish God, a Jewish Christ and Jewish civilization. It is no reflection on the Hebrew race to inquire why it is that Gentiles have no God of their own. We can look to scientists to reveal the God of nature, and add to this the Jesus of gentleness, and we have a civilization based on the altruistic concept of the fellowship of man. The God of nature knows no creed.

How are we going to get rid of the cloud that submerges Jesus? Unless we start with an entirely new concept, unveil the child now repressed. How we are going to get babies for everybody, I can't figure out. But one thing I do know. There is no normal life without babies. You just can't know what love is until you have changed diapers on your own baby. These are bare facts.

If one tries to slip through this world without producing at least one baby the fates get awfully mad and punish them in more ways than Job had tried on him and worse ones too. I know all about the childless woman, as a doctor. To me that is the real tragedy of war. Soldier killed, he's dead but at home there is some lassie who has lost not only a future husband but the papa of her never-to-be-born baby. That means she will suffer from now on. Sometimes she figures out what is wrong, usually not. For her the only surcease is to join her papa who never was. I would give any-

thing I have, I mean everything, if I could find a remedy to heal the hurts of the woman who realizes that motherhood will be denied her.

We make fun of women who have a flock of cats or a dog. That shows how dumb we are. It isn't a cat or a dog of course, it's her spiritual child she visions through a veil darkly in the invisibly future. That is the best the poor woman can do. It shows she has a woman's heart, broken by acts of fate.

As we pursue our studies and try to harmonize the various alleged acts of Jesus our troubles increase. Things are so cluttered up that nowadays we trace him to the temple. The temple was the stock exchange of that day. We find a lot of distracting things that seem to have no relation to babies.

According to Forlong "Baptisms, confessions, crosses and candles have nothing to do with Christianity." He means it has nothing to do with the Jesus idea. Lee, the first Quaker, when asked if his sect observed the rites of circumcision and baptism replied that they did not. When reminded that Jesus submitted to both Lee replied "That is true but he never practiced them on anyone else so he must have regarded them of little importance."

If one searches why the change of name one is rather shocked to learn that St. Augustine wrote (410 A.D.) "That which is now called the Christian religion existed among the ancients and was never absent from the beginning of the human race until Christ himself appeared in the flesh; since when the true religion which already existed, began to be called Christianity." So that is it: just an old article reconditioned and sold to us to fight over.

VII

Really one might profitably terminate the study of Jesus at this point but there is still much of interest, if

not of importance, to be examined. We are told we have no contemporary information when we come to consider the place of Jesus in history. The Epistles precede the Gospels and the earliest Epistles date not earlier than 20 years after the crucifixion. Jesus is unnoticed by poets or historians though this period was embraced in the age of Augustus. According to Conway "There is not a sentence, or a word, on which history can fix as certain evidence that a man by that name was punished by Pilate." Tolstoy regards Conway's statement as unessential considering that we possess Christ's words; the only way we have of recognizing them as the words of Jesus is if they fit our concept of Jesus. We must make our own interpretation. That is better than to pin our faith on what someone said he said because they said so many things that today seem incredible. In fact not until 300 years after the death of the Master were the Gospels recognized by the Emperor Constantine. This sounds like the same process used in the building up of a political platform. The unpleasant fact faces us that an organization already existed and it is just possible that they believed it expedient to agree on something plausible to hand out to the rabble.

In 326 A.D. the Christian sects became numerous and definite in Palestine. At this time according to Dollinger the people already were in the iron grip of the clergy which had developed in 250 A.D. and which was henceforth to be armed by the secular sword. No real reform of morals, says Dollinger, was due to the clergy; but to them were due the miseries and failures of the Crusades. The cruel Constantine, whose conversion was hailed, founded a so-called Christian Empire which presented the most thoroughly base and despicable form of government that civilization has yet produced (Lecky). The organiza-

tion, rites and vestments of the Christian Church were borrowed from paganism, borrowed like a shiftless neighbor and never returned. It seems possible that the two writers just quoted were peeved about something.

Everything is so terribly mixed up. We do not know what to believe. Jesus repudiated, rebranded, obscured by strange scenery apparently designed to keep his presence as obscure as possible. Unhappily it took the Church so long to decide on what Jesus did teach. Certainly if truth were available it would not have taken hundreds of years to fix on a definite time to hand it to the public. What Jesus taught was easily understood but it could not be used in the organization of the Church. The Christ of Paul lent itself better to what was to come. It is necessary to assume the congenital nature of sin in order to sell a remedy for it.

VIII

The Resurrection of Jesus is still another question relative to the life of Jesus which must needs receive attention. A consideration of this is desirable, not because it is important to our own concept but because it is persistently paraded as necessary to our belief, but the result is that the essential Jesus idea is obscured; that is the question of corporeal resurrection.

It is a mistake to apply reason and scientific laws when there is no reason and hence no science. That is what we face when we consider the corporeal resurrection of Jesus. All attempts to make it logical only confirm the impossibility of doing so. Take it on faith if you wish but do not ask a scientist's confirmation.

I am reminded that in my academy days Mark Hopkins' Evidence of Christianity was a required study. Hopkins still rates as one of America's greatest educators. Yet the study of that book left me cold. It

added no facts and destroyed faith. I was sorely depressed and wished I had never seen the book. After forty years I secured a copy of that book and read it again. The result was the same. To try to cite proof when there is no proof, can be no proof, and only insults the young student's intelligence and causes him to reject everything when in fact he need only be shown a different approach.

So it is with evidence of corporal resurrection. I will confine myself to the subject as set forth in a recent book written by the head of a theological seminary. He should know the answers if anyone does. Yet his book leaves me as cold as did the study of Christian Evidences in my boyhood. His answer to the question "Did Jesus' body actually rise upon the third day?" is "Yes. His body did rise as it was when he lived. Yet it did not. What arose was something else." All right, what?

The angels rolled away the stone from the door of the tomb to let outsiders in, not to let Jesus out. We read further "It will be a body conformed to the body of His glory (Philippians 3: 21). It will be a powerful body. It will be a spiritual body, but it will be a body." He continues, "Now I say, brethren, that flesh and blood cannot enter the Kingdom of God." Then he quotes another distinguished divine: "Indeed were it feasible to enter into a thorough discussion to show what matter actually is, such a discussion would, I believe, make it evident that the body of the resurrection is nothing other than God's volitional repetition of the body of the grave—*with splendid additions*" (the italics are his).

If that is the best that an acknowledged expert can do to establish the corporal resurrection one is warranted in categorically concluding that there is no evidence. Silly prating as the above only satisfies the

mind of the moron or serves the purpose of the intelligent.

One may ask in exasperation what difference does it make? All one can say for the theory of corporal resurrection is: it violates no rule of logic. Like the nursery rhyme of "the cow jumped over the moon," it is within the rules of logic. But to visualize such an achievement requires the assumption of a degree of bovine agility that leaves one skeptical.

This morning I heard over the radio, a real proof of the resurrection by a distinguished minister. Thomas was skeptical so Jesus had him put his fingers in the nail holes in His hand and his fist in the hole in his side, after he had risen. "Now", the minister wants to know, "is there anyone so dumb as to doubt the resurrection?" If a recognized scholar cannot do better than that it makes one question whether he is trying to tell the truth.

Some years ago it was my privilege to hear a lecture by one of our most distinguished physicists, Arthur Compton. He presented a scientist's ideas of immortality. He ended his lecture with this sentence—"When it comes to the question of the corporal resurrection of Christ, gentlemen, I am a physicist." In other words, one of the greatest minds of today says he does not believe, nay more, as a physicist he declares he knows it never happened because the God of science says it could not be so.

Why do I so dilate on the subject of crucifixion and resurrection? Because the whole idea is repulsive. If God was all-powerful, why did he allow the human race to get into such a mess? Jesus' plea that he might be spared the cross is the most heart-rending sentence ever set into type. Don't tell me God is good. I have heard peripatetic asses with voices of a bull, with the brains of a squirrel, bellow bow-wow, about the sufferings on the cross. How the blood flowed from his

wounds and all that. And that scene met with the approval of God the Father. The necessity of shedding blood to escape sin has of course no basis in fact. It was an insult to my intelligence as a child and I believe there should be a law against telling it to children.

To repeat once more, really what difference does it make whether Jesus arose or not. He or a spirit told us about the kids and the world is full of children all anxious to give us limitless affection if we will show them that we understand the spirit of Jesus. Why in the name of everything noble do the ecclesiastics feel that they must continue to try to put over the old hoax of corporal resurrection and succeed only in making themselves ridiculous?

One can say that there is no real evidence that Jesus died on the cross. There is just as much evidence that he was stoned to death. An infant's da-da is a spiritual recognition of the perpetuity of the Jesus concept and accepts its male parent as its protector. The child tells us more than all the sayings of the wise men about Jesus.

THE CHRIST OF PAUL

I will admit that I appear as an attorney for the prosecution. Paul is on trial for what he did to civilization. He stands for salvation by faith, the denial of the result of work, changed the name of Jesus, taught the necessity of conversion for the elimination of sin in which it is alleged all children are born. Worst of all he degraded women to the level of the Old Testament status.

Conversion is an ecclesiastic concept. Paul's conversion was clearly a psychopathic phenomenon for which of course he was not to blame. Possibly the stoning of Stephen got on his nerves even though he held the coats of those who threw the rocks. Perhaps

aversion to work was congenital with him. However whether the details of his conversion he related were indications of cerebral disturbance or came as an after-thought is not clear. If he really heard voices it was in his head; if he just said he did, it was politics. That he saw and talked to the risen Jesus cannot be explained on any rational grounds. If he was converted, from what, and what to?

A vast literature has been written about Paul by many learned biographers, one of the ablest attorneys for the defendant is Lyman Abbott. He starts with the very obvious fact that the "literary history of the world furnishes no parallel to the influence exerted by the writings of Paul." We hasten to admit the correctness of the statement but the word requires a qualifying adjective, a plus or minus sign. He follows by noting that all we know about Paul we must gather from autobiographic references in his Epistles and from a not too trustworthy translation. That his writings are mere fragments, that he had no conception that he was writing for future generations is obvious. Abbott states further that "Paul is enigmatical, and we are all interested in solving riddles. Paul translates Christianity, which in its original form was Hebraic, into the intellectual forms of the Occident. Paul is the founder of Christian theology as Copernicus was of astronomy. He is a seer and a prophet overlaid by a rabbinical education, a preacher, orator, interpreter of Christ's spirit to the thought of the world." No abler plea was ever made by an attorney for the defense. Now is that not a pitiable presentation of one of the most learned ministers of the day? One meets on every page: "Perhaps—it must have been—no doubt—we can come to no other conclusion," etc. He starts with the pitiable admission that all we know about Paul is what he wrote about himself. It is like the biography a Congressman writes about himself when he takes office.

We are interested at this point only in the steps followed by Paul, he was not yet either a saint or an Apostle, we must remember. Why he changed the name of Jesus to Christ is, we are told, because the word *Christ* was first used by the Antioch Greeks who used it as a joke indicating derision for the "anointed one" much as we use the word "sissie" to indicate a good boy who spontaneously washes his ears. Why Paul adopted it we do not know.

When I study the ecclesiastical card files I find that all we know of St. Paul is based on tradition as Abbott admits. The more one studies the more apparent is it that it is all tradition, and even that tradition has been milled over, added to to make it as decent as possible. One wonders why all this effort to saint him.

We are told of his eloquence, also that he was rude of speech and that "his bodily presence was weak and his speech of no account." That he was bald-headed is generally admitted. Yet despite this evidence one of the most noted paintings of him makes him resemble in stature and physique one of our noted ball pitchers, and with a heavy shock of black hair. Why this build-up for a small man with a bald-head—that was no disgrace. The artist deliberately committed a falsehood.

We learn that his influence was based on the startling claim to have seen Jesus in the flesh. It is this statement that made it necessary to study the story of the resurrection in a previous paragraph. It is wrong to interpret this as meaning he saw him after his resurrection and engaged him in conversation. He had taken his orders from him in the flesh we are told. No intelligent person believes that statement. We are told Paul preached but he saw the expediency of piping down with the Jewish ceremonials when he was dealing with gentiles. Paul was reared a Pharisee with a cosmopolitan education. Because of this he had a

marked partiality to Roman rule. He preached much and built himself a number of congregations. The one at Corinth was not nice but that was not essential in Paul's mind, as we know now.

We are told that having a political mind he dreamed early of a universal church and through it a universal political empire. The first need for an organization we are told came from a complaint that the Jews were getting more than their share and it was necessary to organize against them (Abbott).

We are told also that he did nothing of the sort, that the church organization came 250 years after his death.* That all he really did was to write a lot of letters some of which he wrote and some of which he did not. The Encyclopedia Biblica states that he did not write thirteen of the Epistles, the others are in doubt (see column 3627-3630). Those who accept the Epistles as his product admit he had some one else write them. Then someone interpreted them, and then they were revised some more. And then the higher critics apparently proved that he could not have written them at all.

We are told he was a good mixer, of that there is no doubt, and bent all his energies to this end. When on his missionary journeys he first registered at the synagogue when he arrived at a new place and then went and hobnobbed with the gentiles. That is to say, in vulgar parlance, he worked both ends against the middle. That he cut loose from the teachings of Jesus is evident. He made no mention of the good things Jesus did in his lifetime. It was of no use as campaign material. Certainly he leaves the Sermon on the Mount untouched and at no place is Jesus held up as an example of gentleness and an advocate of work.

On the contrary Paul set up as the essence of religion, as a belief, not a course of conduct and good deeds. Goodness and virtue, natural or acquired, had

no bearing on one's final destiny was Paul's teaching. "By grace are ye saved. Through faith and not through works." Through grace indeed but a slight mixture of disgrace was no impediment. He was the first advocate of the sitdown strike. Sit down and it shall be brought to you was as attractive 2,000 years ago as it is today.

Newton Mann sums up Paul's doings as follows: "The movement which made of the Gospel a system of thought, a set of dogmas, on the acceptance of which fellowship and salvation are conditioned, was a prodigious step in the wrong direction, for which the church has paid dearly, and which certainly must yet be retraced. We have to begin anew with the teachings of Jesus, and have before us the task of making religion appear to be a life and not a belief—a task which ought to be easy, but which is rendered enormously difficult by the age-long prepossessions derived from Paulinism." That all adds up with an emphatic minus sign when we come to estimate his influence.

A brief account of development of church rule is in order. The tracing of the early Christian church to an ecclesiastic monarchy is what Macauley calls a work of human policy. Thus it becomes necessary to distinguish how it comes to be something apart from Christianity (Adams). It is this translation that brought about the bloody civil wars on issue that had nothing to do with religion or Christianity. Then began a paganizing as manifested by the worship of saints and gorgeous ceremonies which we have on the authority of Professor Adams of Yale University. The church began its organization in the great work of saving civilization from paganism and ended by making a more perfect pagan world. And one becomes lost in the maze of what is politics and what is church. This applied in the Middle Ages to the popes, but also each subsequent sect had its titular head ranging all

the way from Luther to Alexander Dowie. The railway train and the toy wagon have in common the use of the wheel, fundamentally they are alike. It should be remembered that the Christianity here mentioned was that of Paul. The Jesus concept did not enter.

To me Paul was a supersalesman. His conscience, what little he had, if any, made him accept the change of name of Jesus to Christ for reasons no one knows and if anyone thinks he knows he will keep a discreet silence. But we can be supremely glad that inasmuch as he changed the Jesus idea as he did he had the decency to change the name along with the meaning. Anyone informing himself of the fact will wax wrathful when he sees the hyphenated name.

If the higher critics do absolve him from the responsibility of writing the Epistles, they were only a small part of his misdeeds. Paganism had elevated women to an equality with man. St. Paul, what did he do? He threw women back into a position of inferiority, immeasurably lower than that occupied by them under the best conditions in Pagan Rome.

One cannot understand why Paul's editors did not blue-pencil him when he delivered himself of the following, whatever is the nice word for it. Paul said "For a man indeed ought not to cover his head, forasmuch as he is the image and glory of God; but the woman is the glory of the man. For the man is not of the woman; but the woman of the man. Neither was the man created for the woman; but the woman for the man. . ." (1 Cor. 11: 7-9). "Wives, submit yourselves unto your husband, as unto the Lord. For the husband is the head of the wife, even as Christ is the head of the church: and he is the saviour of the body. Therefore as the church is subject to Christ, so let the wives be to their own husbands in everything (Ephesians 5: 22-24). "The wife hath not power of

her own body, but the husband. . ." (1 Cor. 7: 4). I can't understand why the higher critics allowed that to remain in the New Testament and Christians still tolerate it. It would seem that anyone who had a mother, a sister, a wife or a daughter would have torn it out in contempt.

When I read the boast of the clergy that they are supplying three million New Testaments to our soldier boys I cannot help but envision the following scene. A boy in a foxhole listening to the bombs bursting over his head. He is thinking of his mother, his sister, his wife or sweetheart and his eyes fall on the quotation just noted. I can hear him cry, "My God and I left my loved ones exposed to Saint Paul and his Christians!"

In a word the real crime Paul committed was when he forgot that sex should be a servant to the spirit; he loosed a tyrant, a natural passion was encouraged to become an unnatural lust. That the baser elements are more subject to appeal than the noble goes far to account for the ease with which he spread his doctrine.

Even so late as my childhood women were regarded as inferior. They were not allowed to raise their voices in church in some denominations. The question of whether or not they had souls was just around the corner. Just think of that, throughout the centuries that is as far as the church brought the women, or better stated, allowed the women to rise. Compare this with the picture in the Egyptian home, in your own home. Yet you go to church to hear the virtue of the Saint exalted!

Only a sheet of asbestos could convey the words I would fain write here when I think of how he treated women, as I personally saw women treated by his later representatives in my boyhood. Imagine a girl of twenty told to shut up when she started to testify that she believed in Jesus; she was told to sit

down, women were to be seen and not heard. She cried and I cried too; she was my sister and I was only nine years old. Of course not all communities were so suppressed, but I know of one too many. Two thousand years of suppression, and when one realizes how far women have advanced in the last sixty years it is indeed most encouraging. Lecky hints that Paul's degradation of women was due to his celibate state. This is not the whole truth because the offending party above referred to had a family of ten neglected children. Paul cannot be made anything but what he was. It is a truism that one can gage a civilization by the status of women. Paul has degraded women lower than it was ever done. We must brand him as representing the lowest of the semi-civilized tribes. Yet he has fashioned our plan of salvation.

The Encyclopedia Biblica above quoted brings me further comfort. Besides going to great length to show that Paul never wrote anything, traces his genesis as follows: The name of Saul in the Old Testament represents a phallic cult (Genesis xvi, 9, ff). Then we have a phallic King of Assyria (2 Kings xv: 19); the rock that begat them (Numbers xxv: 15). When one remembers that the Encyclopedia was written by learned men I am glad to assume the Mosaic attitude and say the other men said it.

But oozing around there are a lot of things along the same line. We are told that Baal was the representation of the phallus, and that the very name Paul is derived from it and then when we are told that Paul was bald and small, we are prepared to hear that he covered Christianity under the phallic cross as a solo-phallic cult. We would be disposed, naturally, to dispute such a statement except that the Epistle to the Galatians is one long plea for things no longer discussed, even across bridge tables. In I Corinthians x: 4

it tells of the "Rock of Christ" and the "anointed one." To go further I would needs write words I have never written. I would only suggest that before religionists rejoice at the resurgence of religion with the war they inform themselves of the phallic origin of what they teach. It is impossible to separate phallicism from Christianity and the Paul idea, be he fact or fiction. Even Abbott admits if you get too much spiritual exaltation, it may be accompanied by great excesses. "These excesses" he goes to the unnecessary trouble to explain, "are not wholly virtuous." Evidently he had been attending some oldfashioned camp meetings. But unless he had the help of some small boys who knew the topography of the burning bushes, he just did not see anything. In such instances it is easy to see the phallic import of religion. In most situations it is happily very much more delicate, but it still covers more or less hate.

Considering the teachings of Paul I see no reason why we should shut our eyes on the phallic worship, frank in early history but now covered with nice phrases. The Bible tells all about circumcision, unblushingly. If one wants a good laugh one needs only to inform himself of how circumcision was a sort of symbolic thing of something worse that produced loud protests. Believe it or not one church catechism sets apart a Day of Circumcision. Very appropriately it is January first. Nothing like starting the year right. Teach the prepuberty child the phallic anatomy, this followed by the endocrine stimulation of puberty and he lands at his wedding day prepared to make it not only holy but wholly hilarious.

The question of the relation of phallicism to religion is distasteful to any normal mind. Paul is its highest priest. There follows as night the day, lust and hate. The church was and is based on phallic worship. Mysti-

cism on which the church is based is inseparably connected with the erotic temperament. It's a curious thing that the esthetic who pretends to be removed from phallic worship is really fundamentally intensely so. The modern version is the old bachelor who delights in viewing unmentionables in store windows, or even in having them in his possessions. We see this latter phase exemplified in the case of Mr. Schnickel-blitzer, late paper and crepe hanger of Austria. Elsewhere I had the temerity to suggest a possible resemblance between this distinguished and extinguished party, and Moses. They were both inspired, both interpreted the Commandment not to kill as applying only to his own tribe.

At any rate the survival of this urge is why the boys are marching. That is also the reason why religion should have the courage to take a look at from whence they sprang and the spirit they convey. But in the meantime, avoid camp meetings.

In order to get rid of phallic worship we must abandon mysticism and the writings of inspired prophets. The Old Testament writers were unspeakably vulgar. Nobody will deny that statement. The New Testament is a great advance over the Old and except for Paul is without the phallic worship. That is the aggravating thing.

Sad to relate the same shadow still hangs over us. Our respected literature goes as far as the police will permit. Same old spirit in modern dress, or undress. For every vulgar picture the publisher puts in his paper, why not the picture of a baby with its first tooth? This would indicate that the editor knows better but is obliged to cater to the wishes of a part of the public. If anybody had the courage to publish the old phallic picture, one could see the unbroken line down to the illustrations in the daily papers. In the

human form divine at least we can see there has been improvement. Don't blame the publishers, they are only presenting us with their diagnosis of the vulgar state of society as it is, at least the major part of it.

When Paul sold Jesus down the river and set up in his stead a stooge and called him Christ he inaugurated the most far reaching event in history as Abbott states. The Hebrew race believed in salvation through work. For this Paul substituted salvation by faith. Work counted for nothing. Politically it was a masterful move for man is a lazy animal and is constitutionally fitted to grasp the idea of the PWA, but he betrayed his race. On that he made possible the future development of the most perfect political organization, called the church, that ever has been developed.

I give it up. Paul was either a saint or a sinner or an apostle, or something else. Certainly he has had the advantage of an imposing array of attorneys for the defense, which is an indication that the person at the bar is going to need a lot of defending. I once heard a judge say that when an accused was represented by an ex-governor and a couple of Congressmen he knew the party was guilty. No innocent man ever needed such an array of talent.

There is one thing in the life of Paul that most of his biographers do not mention but the one above quoted writes: "Paul himself had thought that God put the mark of curse on Christ by allowing him to be crucified. Otherwise when Christ called from the cross 'My God, My God, why hast Thou forsaken me!' Paul thought if God had not been awfully mad this would have melted a father's heart." Abbott apologizes for him by saying that Paul said that before he knew better. I have often wondered why a learned clergyman put that into a book. When or if he learned better we are not told.

Considering the foregoing the hyphenated word Jesus-Christ excites in me the same noble sentiment as would a Biography of That Great American Lincoln-Capone!

That is why Paul has needed so many biographers. To me they are sad reading. Quoting something that never happened to prove something which likewise never happened. The jury has not yet rendered its verdict. However Lyman Abbott shows some evidence of facing an unfavorable verdict when he says (p. 324) "By the fifteenth century Christianity was so modified by the Legalism of Judaism and by the paganism of the barbarians that it is difficult to say how much of the Christian church was Christian and how much was pagan."

However I believe that we can account for the evil influence Paul has worked on succeeding generations in his prayer: "Teach us, Lord, to pray after this manner: Begin with reverence for your Father, then ask him for what things you want. Are you hungry, ask him for bread; are you perplexed, ask him for guidance; are you tempted, ask him for deliverance; have you sinned, ask him for forgiveness. Tell him what things you have need of. That is all; that is prayer." That covers about everything except he should have said: If you do not want war, tell him about it and there will be none. Stripped of all else the descendants of Paul prayed for peace with the assurance of salvation.

With all the learned treatises on the life of Paul his modern biographers held out some very interesting items. Further data on the life of Paul is found in the Golden Legend of Jacobus de Voragine. The incidents about to be related are doubly interesting because they were written before the ghost writers had a chance to exercise their handiwork. These records

make it appear likely that the higher critics are right in assuming that Paul is a nebulous person. We learn from this remarkable biography Paul did a lot of miracles just like Luke relates. Most interesting of the miracles was the restoration to life of a young man, who in order better to hear the sermon, sat in a window, fell out and was killed but Paul restored him to life, possibly it was only a cerebral concussion. That is one way of taking care of those who go to sleep during the sermon. Another interesting item is that Paul when bitten by a viper suffered no inconvenience. also that his host and his family subsequently were immune to snake-bite. Thereafter when a child was born to any descendents a viper was put in the crib and if the child did not die it was legitimate. There the account ceased. While modern blood studies have not yet reached this degree of certainty as to parentage, it is more acceptable in courts of law.

Even more remarkable, we are told that Nero got so sore at Paul that he had his head cut off. After his head was cut off it pronounced the Hebrew name of Jesus. The first hemorrhage after his head was cut off was pure milk. The next day after the beheading the executioners came back and found Paul standing between Titus and Luke, evidently without his head for we are told that after the head was severed it was dumped into a ditch with a lot of others. One day when the ditch was being emptied Paul's skull was identified because of an unearthly light which shone about it. As further proof they put the skull at his feet in the coffin and the body turned end for end so that the skull was again at the top end of his body. This remarkable incident is confirmed by a letter from Saint Dionysius to Timothy. Gregor of Tours states that the chains which had bound Paul performed many miracles. Sometimes when the priests filed the chains

so they could pass around the holy relics, sometimes the filings dropped and sometimes they did not. I add this just to show that the people of that day liked their mythology strong.

The record quoted above notes that he lost his head but later put it back on. His defenders emulate him in so far as they lost their heads and it is time they put them back on. The need for this is evidenced by a book on Paul written by an eminent scholar, Sholem Asch. He frankly labels it a novel but even a genius with the liberty of a novelist cannot make a decent person out of Paul.

That was Saint Paul. One of our greatest biblical scholars, Wendt, says "Paul has in reality had a much greater influence on the Christian doctrines of Protestantism than Jesus himself." In view of the confusion the study of Paul leaves us in, who he was, what he was, even if he was, he still dominates us.

SUMMARY

Jesus appeals to our strength, the Christ to our weakness; of that there can be no doubt.

The concept of the life of Jesus, in so far as it concerns each of us, so far as I can see, is a formula for living. The life of the child and its mother excites one to protection, to achievement, to work.

Jesus alone in all history furnishes the only basis on which a real civilization, a brotherhood of the human race can be builded. This concept was developed in the conscience of man as he viewed the mother and her babe, and that Socrates conceived the existence of something in man which he called the soul, something of such magnitude that the idea of immortality must needs follow. That these thoughts come to man unbidden should be more inspiring to noble effort than when received through the confused presentation of revelation.

We forget that our weaknesses can be cultivated. Given leisure, a high protein diet and the Gospel of St. Paul, it is possible for the human male to emulate the tomcat, including the howl. The concept of Jesus on the contrary modifies the lust of the Old Testament to the delicate sense of spiritual parenthood the newborn child calls forth. It is on this anchor that civilization must rest.

Jesus is the symbol of love of the child, good will toward others, the brotherhood of man. Just now it finds eloquent expression in the young doctors at the front. He adds to learning and science that something which causes him to leave his wife and children and go forth to use his science for the preservation of friend and foe alike, indeed he recognizes no foe except the forces that bring on the war. He has given his young life learning how to prevent suffering. He leaves his own concept of Jesus, his babe and its mother, to journey to unknown lands. He carries nothing but the Golden Rule.

We pass from the concept of Jesus to the young doctor without the slightest jar. The doctor on the battlefield says just as clearly as Jesus ever did: Let the children of the mothers left at home come to us and we will go to the blood bank the loved ones at home provided us, and give them what they need. Life of self for the life of others was never more nobly emphasized than by the doctor on the battlefield.

How near the human heart the Jesus concept is we hear from the battlefield. A lad in a foxhole in the Aleutians declares he wants to fight, get this job done, get home and get himself a wife and baby and an overstuffed chair: but he isn't coming back. He is dead. The religion of Paul sent him to his doom, his Jesus concept is never to be realized. Liberty removed by the draft, life lost. The liberty civilization most

needs is from the teachings of Paul. If our soldier boys achieve that it will be possible to make a new start in a world civilization.

CHAPTER VIII

PRAYER AND ITS RELATION TO IMMORTALITY

There is no more dangerous field for the honest inquirer to tread than the question of the efficacy of prayer and the question of life after death. We face at once the beliefs of mankind which have been their common heritage for countless centuries. One must realize at the outset that only condemnation awaits him for his effort to find the truth. Yet the human race must face facts. We are forced to recognize that the simple passive supplication no longer protects us. We simply must recognize that belief in prayer and facts are only remotely related. In fact the word prayer like love and religion may mean almost anything. The range is from the sublime to the ridiculous. It is as much a heritage of the scientist as of the bishop and the pontiff.

The question of life after death is more remote and more complex. We see now that the belief in salvation immediately after death makes reckless soldiers of pagans. We must ask ourselves if this is because these people really believe what we only pretend to believe. In either case it is a belief of reward, a selfish thing. This is quite different from the appeals of individuals to the infinite, as in viewing the stars, or listening to music. That sentiment asks no return but is a wordless expression of appreciation of a universal force. This idea of perpetuity is as accessible to the scientist as the theologian. Immortality is not to be demanded as a reward of belief but as a constant uplift through life, the immortality of achievement.

PRAYER

Prayer may be defined as a vocal request for some favor from a higher power capable of reacting to the

special request of the petitioner, and is based wholly on the judgment of the supplicant as to his needs. As such it may be the reaction of the most primitive minds. On the other hand it may be the expression of the noblest desires of mankind to achieve the best that is within them. Not to ask but to give.

I

We must first consider what we know about the efficacy of prayer when applied to some specific request. The time element is disregarded. Say one in a gall stone crisis prays for relief. We know that untreated the spasm relaxes in about an hour. Prayer would need to show its efficacy by reducing the period of spasm. The other time limit is more difficult to explain. I have listened to more prayers for the prevention and cure of diphtheria than all other diseases combined. After science had discovered a cure and prevention of diphtheria the clergy joyfully proclaimed that their prayers had been answered, that God just used the doctor as a sort of laboratory technician. At least the evidence of answer of the doctor to his prayer was unmistakable. But the doctor's prayer was expressed by using the brains God gave him. There is no more diphtheria.

So it has been in claiming credit for other scientific achievements. Just now the clergy have a new challenge in war. Of course they prayed for the safety of the nation. They assure us that the cannon the enemy is building will not shoot even if war comes. For prayer to be of use it must act within the time of crisis. If in a thousand years war is no more, will the clergy hunt out the newspapers of today and say: Here is the answer to our prayers of a long time ago?

The clergy refuse to try to determine the efficacy of prayer. It would seem that an old doctor is a fit person to attempt an inquiry. In victory and in defeat

he must look at truth for only by studying defeat can he hope in time to convert into victory, as in the case of diphtheria just noted. Honest inquiry as to the efficacy of prayer has never yet been attempted yet nothing in human experience is more amenable to scientific analysis. Age old benefits have made any such inquiry repugnant to the clergy but much a doctor is compelled to see is not beautiful so to look at a prayer is but another page from his casebook.

II

Since prayer is a specific act, assuming a specific result, it lends itself to scientific inquiry, at least to the inquiry of the scientist. If I appeal to memory the problem is more complicated. The long prayer of the old minister included so much territory that a check-up on each item was impossible, impossible in fact when the petition involved the abstract, like the request for more grace, humility and brotherly love. The tone of the petitioner was imperious, made in the abstract, no thought of a concrete answer, nothing to suggest humility. The tone was the same when addressing scared small boys into accepting salvation. No one dared to question their efficacy on penalty of eternal damnation. It was not asking God to damn little boys, it was telling him he was already damned and better be doing something about it.

I have a certain qualification for the comparative analysis of prayers. I have heard all varieties. There is no place one can better hear the tone of pleading, or rather could, than at the bedside fifty years ago. There was the imperious pleading at midafternoon. God was told what was demanded was to restore the child to health. Within a few hours one heard the prayers of the parents as they stood beside a dying child; but that was a most humble pleading: "God, please spare my child!" It was not a prayer, it was a cry of distress.

When I heard these cries while I was a young doctor my mind invariably reverted to an experience in my early boyhood. I heard a most agonizing cry from the grass some distance from our house. I grabbed my rifle and hastened to the scene. I discovered a large blacksnake which had half swallowed a half grown rabbit. In a flash I had sent a bullet into the head of that snake. I had the same feeling when I injected antitoxin in the early days of the use of the serum. I wish I could say I thanked God for the efficient remedy, but I fear it was more like "God damn you bacteria."

It is a most interesting and significant fact that prayers have just about gone out of the sickroom except when the patient is already dead or dying. If I expressed my honest conviction I would regard it as ecclesiastic politics. What else can it be? Whatever life is, it has flown. When doctors were helpless and the disease raged, the resort to prayer was logical, but it was only a cry of distress. It was an unwise choice for the testing of prayer because the mortality was so high. Prayer for the hysteric was a certainty, they never die. Now prayer for the diphtheria patients have ceased because there is no diphtheria.

In the interim as medicine became more efficient we hear "Doctor, save my child." Now we no longer hear the other. The parents have faith. The doctor and his science will accomplish all than can be accomplished. The point I wish to stress is that parents were quick to distinguish the source to which they must look when the baby is sick. The God of science has replaced the God of Moses in the sick room.

III

In seeking a classification for prayer some time ago I was dreadfully horrified while looking up in the dictionary the definition for prayer to find the allitera-

tive word *prattle* in juxtaposition to the word prayer. But there it was; I could not avoid seeing it. Yet when I recovered from my consternation I realized that really here ready-made was the classification I needed. Supplications may be *prattle* or *prayer*, soap box or closet.

Prattle the dictionary says is to talk or chatter in a foolish or a simple-minded way. Nothing is visioned, nothing is expected. It is a response to a simple impulse, purely a reflex from the basal nuclei in the brain, never reaches the cerebrum at all. The prayer wheels of the heathen belong to the same class as prattle prayer because they can be started and the individual can employ his time in figuring out a new kind of something or other. I believe the usual blessing at the table could be played on a phonograph—it is still a purely automatic affair.

The real prattle prayer which I look on with contempt is delivered according to the clock, or the calendar, or the order of service, asking for the reversal of the order of things. These are not simple reflex prattle. They are planned for a purpose. These prayers are hired done according to the type we want, at so much per annum. Asking in the same discourse for a fine day for the Sunday school picnic, for the salvation of the Chinese and the damnation of the Turk, not to mention the more recent versions of utter depravity. Such prayers are designed to harmonize with the desires of those to whom the prayers are offered. They are as futile as writing to a Congressman, politics and all.

When I see a flock of fine persons all saved long ago filing out of the church basement on Wednesday evening I think of the standard account in country papers when reporting a social event, "a pleasant time was had by all." Saved beforehand and still saved at the

close. I have great respect for those kind of prayers. It is a family gathering, a communion of kindred spirits, like a Thanksgiving dinner. I used to attend them but came to realize that while it has its uses it was a waste of time to a surgeon to attend, because it was not his province to think of his own pleasure when the reality of human suffering beckoned him. So far as I can learn from those who attend and from what I hear over the radio or can learn from the papers I am forced to believe that most prayers emitted now belong to some one of these groups. If one analyzed these prayers there is no other conclusion one can reach. The less said the better. This applies I believe to both these remarks and to the prayers.

Real prayer I would define as a spring-board for action. The result depends on the intelligence and energy supplied by the individual. My father believed that one had no right to ask God for things he could do for himself and the limits of his own power could never be determined until he had tried his best. I doubt if he believed anyone ever did his best. The consequence was his prayers at breakfast were prattle and his words were spoken in a different tone of voice when he really prayed as follows: "Well, boys, let's get busy." Zipp. Honest effort to the limit of one's powers was his idea of prayer. I have time and again seen him sit down at the supper table in the harvest time too utterly exhausted to utter a word. He looked at us with pleading eyes, we understood and started to eat; he had already said his prayers with his hands. Yet he had of all persons I have known a firm belief in eternal life. He believed in his God and he believed in himself; and he believed in keeping his boys at his heels.

Everyone I am sure has a most ardent wish that there was some power to whom we would appeal in

time of stress and obtain a concrete reply capable of immediate application. Of all people I can think of the surgeon is most in need of prayer because so often he must feel a sense of responsibility which he and he alone can assume. Thus when the death rattle comes: "Oh God."

It appears to the surgeon that the most eloquent prayers have no words. Happily no one knows what he is thinking when he has a knife in hand. I not so long ago was asked by a nice old lady if I pray before starting an operation. I told her "Yes . . . What I mean" I added, "is that I have keyed myself, in view of the responsibility I am assuming, to four times my normal nervous tempo." But have I prayed for strength to do this operation on her daughter? Most assuredly I have—began more than fifty years ago to learn the anatomy and this has been followed by many thousand like operations. She replies she knows, and she fully trusts in my skill. But she adds that the patient is her only child and I reply that for the next half hour she is also my only child. Both our prayers were answered but the answer is dependent on my years of toil. Fine prayers both, hers of trust in her surgeon. The surgeon's faith was in the laws governing the course of operations. I have lived through so many scenes that no word need be said. I regret to note that such scenes are growing less with each generation. Now the friends' trust goes direct to the surgeon which is fine, but I miss the old ladies. It would sound silly perhaps if I confessed I miss their spiritual help.

Here is a real surgeon's prayer, also the prayer of a real surgeon: Picture a surgeon in the small hours of the morning reviewing a case which has resulted disastrously. Why did the patient die? Perhaps death was due to a so-called accident of surgery, as an infection or an embolus. Accidents of surgery are those things

that in a concensus of opinion may be used to excuse the things we do. They are like floods and tornadoes which civil law says are acts of God. But the patient is dead. A slipped ligature, an unhealed wound, that is different. If not the fault of the surgeon it is a reproach to the science and art of his profession in general and himself in particular. A dead patient is a doctor's responsibility no matter whether it was within human skill or not to prevent it. Never in my life have I resorted to mental alibis to explain my fatalities. If the patient dies I am responsible. Of course usually at the time I am helpless and at a loss to explain it. I want to know so badly why that patient died. More dissections, studying more slides, reading, reading to see how others met the same problems. Praying without words for light, crying out in the bitterness of one's soul the kind of prayer that cannot be repeated on a wheel. With increased knowledge throughout the years explanations appear in some cases. I did too much, or too little, or should not have operated at all, or not then. It would be glorious if the surgeon could cry out to God to keep him from doing fool things and then realize that he ceased to do fool things.

Suppose I could ask God that if in my clumsiness I implant bacteria into a wound will he please knock said bacteria dead, put that string back on a bleeding vessel. I know full well I did something or did not do something that is accountable for the disaster. To petition a higher power would be prattle even if no word is spoken or if spoken in the profoundest veneration.

What surgeon has not thought or even exclaimed in the silence of his room: "Oh God, is there no help for us fool surgeons?" Yet the surgeon knows that his exclamation, made in the deepest sincerity, is foolish. All processes of wound healing proceed according

to fixed laws and he can escape disaster if at all only by conformation to these laws; to conform to them he must understand them better. My labor then is an act of prayer and receives answer not by changing the laws of nature but by a closer conformity to them. Never in my life have I blamed God or a nurse or an assistant for my failure.

Work and not talk constitutes the real prayer. The prayer of the surgeon is expressed by him in the long years of preparation. The more skillful the surgeon the fewer the disasters. The experience of every surgeon emphasizes this. Experience speeds up the operation and this lessens infection, the speedier operation lessens the risk of embolism because it makes for better healing of the wound. Experience tells us more and more about when the patient is ready for operation and when not to operate at all. Are prayers answered? That kind most assuredly are. I can prove it by my case books. The gradually lessening mortality rate as one's skill increases is the real evidence that the prayer in the stillly night heightens his ability to try. My prayers have been answered because I have used the small speck of brains that Fate gave me in a serious attempt to obey the laws of nature. My father taught me what it means to pray.

But I cannot leave my old lady friends without a further word of appreciation. There is a purely personal type of prayer, which is not a prayer at all in the usual sense and for which we should have a separate word. They need even not be directed to the God of Moses but they go way beyond to the ultimate limbo of space. It gives the person great comfort, even a sense of edification, though it does not influence events nor is it uttered with that object in view. They are purely hand-made. One expects no answer for specific events. These are better described as allowing

one's mind to respond to nobler thoughts. I can give a good example of this out of my own life. At an early 'teen age I found a quotation from Ruskin. It is as follows: "We hear much of the thoughtlessness of youth. A youth thoughtless? There is only one place where one can nobly be thoughtless, his death-bed. No thinking should be left to be done there." I have repeated this quotation many times in the last fifty years and it has become to me a prayer. It has been the one wish of my life to get all my thinking done before I reach my end. Now that might be classed as prattle but to me personally it has been a sincere prayer. Certainly I have never asked for anything but at least I have received a just and abiding satisfaction. I feel with Will Rogers when he said a few years before his untimely end: "All there is to life is to go away satisfied." I feel my little quotation has achieved it for me. Beside the above quotation I mumble Shakespeare, Poe, Shelly, Ibsen, and all the rest, to myself and I feel edified but it does not influence, except possibly in a very indirect way, the one object of my life, the welfare of my patients. I have to be just as careful in placing a ligature, or in applying sutures. That is my responsibility.

I fully realize that many people gain a like satisfaction by repeating prayers either memorized or read out of a book. It gives them satisfaction and one may say that they secure spiritual satisfaction. Some slander this type of prayer by saying it helps to keep the one who prays from sin. This is definitely not true because many who so engage could not sin if they tried, even without the prayer. We must realize that this type of prayer has no influence on current events nor is it expected to have and that is what makes it noble. It is noble because it is not selfish, only expressive of a desire to achieve a more noble life, to come

out of themselves. It acts to heighten the tranquility, or to reduce the tension of the person uttering them; even though they are repetitions of a set prayer or read from a book. I refer to this type of prayer with reverence. It is a sort of sedative; if one believes it helps, it does. To many it helps to bear the burdens of life, disappointments and grief, but it has no effect on the source of these disappointments and griefs which are usually a thing of the past. Nor are they potent in preventing the recurrences of the cause of griefs in the future. It is the prayer to assuage the pain of the fool things done, the mistakes made, the disasters that come through no fault of one's own. It is particularly potent for those who have struggled nobly and are faced with disaster. Here is an instance. I struggled long years with a mother to raise a runt of a boy. He became a real man. The last words I heard her say were "My God, why must my boy lie in Flanders Field?" He was all she had in this world, to him she had devoted her life.

An old lady in prayer is one of the most ennobling sights I have ever seen, it is an expression neither of faith nor belief. It is just their hearts reaching out to the Eternal Stars.

The most beautiful creature on earth to me is an old lady living in her faith, my case book records hundreds. Just to mention one, a pioneer who endured privation, raised a fine family, and they also theirs in turn. I stood beside this little creature and watched her brother die. I attended her once, close to forty years ago, in a serious illness and she believes I saved her life. A few weeks ago she whispered to me: "My, you look fine, I pray for you every day that you may keep your strength and keep on helping others." She is fully convinced that her prayers help. I know they do. Who would not be impressed by this simple faith to further effort to justify this faith? Though she ex-

pects direct action it is operative only through increased effort on my part, that it engenders. Note that the question of salvation never has come up. She and I have the same idea that I shall always keep on working. Never known beyond her own small neighborhood, in her late eighties, soon she will graduate cum laude. The spirit of a noble woman, Andromeda—both spell infinity.

Indeed life is such a funny thing, so much just depends. I have two girl friends just turned ninety years of age. One is living happily with her daughter and her daughter's husband. One day lately she stopped playing the piano just long enough to say serenely "Pshaw, when I was seventy I thought people when they reached ninety were really old." The other girl friend is in an institution, alone in the world. All I can do for her is to send her books and medicine to help her through the sleepless nights. She says she prays for me that I may live long and help others. She calls me her boy friend and thinks it is a lot of fun to write me long letters. Her cry is: "Lord, why hast thou forsaken me?" That is the most heart-rending plea I have heard and I have heard it often. It is that of Jesus on the cross; nobody heard his plea, I hear hers but can do so little.

I mention these two instances to show that while it may be good politics to assure all alike security in old age it takes more than roof and food to bring the security the aged crave. They crave the presence of their children and this present political solicitude does most to defeat this end. Relieve people of responsibility and they are denied the fruits of thrift and toil.

There is yet another variation. One of my most valued friends, the local parish priest, wrote out a prayer and placed it on my table lamp. To me it is a noble thought but the chief value to me is that it gives me

a look into his inner self. Of course it means something different to me than it does to him and I believe it helps me more than it does him. He thinks in terms of specific results, I do not. He shifts responsibility, I accept mine and record it in my case book.

IV

IS PRAYER EVER ANSWERED?

The old time doctor listened to many prayers, delivered by all types of persons, some humble, some bombastic and self-assertive. Nothing ever followed that could reasonably be ascribed to prayer. One came to ask himself the abstract question: Is prayer ever answered?

In most cases so many agencies were at work which might have been active at the same time. The prayers of the minister vs. the treatment of the doctor. Such instances naturally ended in a tie vote.

In my early day when a patient recovered the minister got credit for the job. Sometimes a disease like pneumonia took astonishing turns when there was little if anything happened to dispute fate as acting alone. I have in mind two cases of typhoid fever which suddenly terminated in recovery. We worked jointly on one. That was a great event for the minister. Another case ran a like course terminating in sudden recovery on the ninth day. The patient lived far out in the country and the roads were muddy. Therefore he had no prayers said to him and I got the credit for the marvelous cure. I assumed the attitude of the ministers and just looked complacent but I knew I did not know why the sudden cessation of the symptoms in either case. In that day nobody pulled the absent prayer stuff.

Just recently there were concerted prayers for the recovery of an important dignitary. If everybody were honest in our inquiry we would note the time of the supplications and compare it with the clinical chart in

order to see if there was any change in the course of the disease following the vocal effort. Even suppose he did improve, we would need to prove it was more than a coincidence. Maybe the doctor's treatment helped but I will waive all claim for credit for any improvement. Suppose the nurse had just given the patient a hypnotic and the pain was relieved in ten minutes as she knew beforehand would be the case. If ministers want to get in on the therapeutic game the nurse should enter above the morphine notation: Rev. Dr. Doe prayed for whatever he did.

The question of the efficacy of prayer is clear, looked at from one point of view. If something desired follows the prayer, it is natural to assume cause and effect. That is the logic of the simple mind. I once saw in cooperation the relation of faith in prayer and faith of a person in his own ability, the two operating independently and each unbeknown to the other. A neighboring bull ran amuck and endangered travelers along the highway as well as the several local resident families. A sixteen year old son sallied forth to subdue the raging animal. The mother was terror-stricken when she learned that her boy had gone forth to do battle. She prayed God to protect her son and strike the animal dead. The boy went to the barnyard and calmly shot the bull dead at fifteen yards. The mother was overjoyed when she learned that the menace had been removed. Her prayers had been answered, she never doubted it to her dying day. The family minister sought this as the evidence that the mother's prayer was answered. He pointed out that the boy and his gun were but instruments through which the mother's prayer had been answered. The mother thought that was the proper explanation. It was the subject of a very powerful discourse the following Sunday.

The boy was unimpressed because he had learned by experience that he and his gun had been equally ef-

fective in like circumstances when his mother did not know about things, hence had not prayed for him. He also had faith, faith in his gun and faith in his very outstanding marksmanship under stress. He had learned by experience that he had this talent and that his gun could not miss fire because he kept it in perfect condition. Faith both had and the end results were satisfactory to both.

The ideal situation for testing the efficacy of prayer is an event for which a single prayer is asked and in which it is possible to follow the subsequent course of events. The ideal event is furnished by the marriage ceremony. The time is specific and the subsequent course is easily followed. The marriage ceremony may be sacred or merely legal. The first requires the services of a minister whose office is believed to add something toward the assurance of future bliss. The other performed by a judge is merely for the purpose of keeping the records straight so the neighbors know who belongs to which. It is very easy to compare the after-results. This study is entered into more fully in a later chapter. I would like to add here that obviously courtship and marriage is a biologic process and really falls under the domain of the doctor.

Sometimes if people really believed prayer would be answered those praying would on occasion be suppressed. For example of the utter futility of prayer cast a look of sympathy to the chaplain in a legislative hall who asks God to guide the deliberations of the august body before him to give them intelligence and an honest heart to work for the welfare of the people they represent. If the statesmen had any idea the prayers would be answered they would chase the suppliant out of the hall. Prayer before a legislative assembly is like the word *applause* written in speeches, purely for consumption by the yokels at home who make up the electorate. No closet stuff this, it goes to

the press. I am sure no one will miss the humor of the situation when a blind minister is so commonly selected for this function. Only such could put a true hope into his efforts.

I have done much checking up on the efficacy of prayer on my own account as I have observed it in my practice. As a young doctor I listened to many prayers for the sick, even though in those young years when I believed, at least hoped, for the efficacy of prayer. Hope gradually waned and my case book tells why. My first experience had to do with a fat old lady sick with pneumonia who, according to the laws of prognosis, was due to die of heart failure. The family pastor, a sincere old man, prayed for two hours, actually, in a fervent manner. Ministers were industrious in those days. I sat at the bedside, finger on pulse. Prayer finished the minister assured the grieving family that the patient was better and would recover. The family was elated and thanked him for his services. As he left the room there was a satisfied benign smile on his face. I still can see that smile and it has haunted me. Did he feel that he had rendered a service and that his prayer would change the laws governing the pulmonary circulation? He was a fine old man and I was convinced his faith blinded him to the hard facts which I had to face.

The time of the above discourse of course was from 3 to 5 P.M., the hours when nearly all prayers for the sick are delivered—delivered is the word. After the minister went away I continued to sit at the bedside of the patient, now and then administering stimulants all of which I realize now did no good but in that early day I had faith as the old minister had. Nevertheless the pulse increased in rate, became more feeble and at just 5 A.M. she died. What was the young doctor thinking all those weary hours? It was very obvious that the minister's prayer and the doctor's

medicine were equally futile. The patient was fat and old, with a decompensating heart. The hard laws that govern the natural course of disease just decreed that such a heart could not weather the increased load the solid pneumonic lung imposed on it. I learned something—camphor and oil in such a case is useless; the minister learned nothing.

Viewing the attitude of the general public toward prayer as seen by the doctor may be illuminating. Now after fifty years the scene above would be entirely different. Pneumonia in that period found all doctors, great and small, equally helpless but has now in large measure conquered that disease. By what agency? Someone invented or discovered a chemical compound which destroys certain forms of bacteria. Don't tell me that what was going through the young doctor's mind had anything to do with the discovery of that chemical. I did not dare hope such a thing would be possible. Yet, as noted above, ministers have the temerity to say that the chemist's discovery was in answer to their prayers. The drug was developed because chemicals act in a certain way, not for some particular chemist but according to laws governing all chemical reactions.

Returning to the sickbed scene above mentioned: That old minister assured the family the patient would recover. He did neither himself nor his cause any good. After the patient was dead the family could see the old minister was wrong. They believed he was sincere and so do I. Of course his words gave the family new hope and that helped for a few hours it is true but it was to be dashed to pieces in the end. Nor was that poor kid doctor who had wasted a good night's sleep fooled for a moment. Somehow this useless effort, from a strictly therapeutic point of view, had its compensation. The kid doctor sincere in his efforts just sort of edged in between the family and the preacher in the

affection of that family. This endured for the decades that followed. Is that definitely fine touch which exists between patient and doctor prayer? Here is the joke on the minister. My prayer was answered, his was not. I was honest, he was just kidding the family from habit, even though he was honest in the act, but in addition to honesty, so far as we doctors can see, one must show results.

Figure it any way one wants, the increased efficiency of clinical therapeutics has just about eliminated prayer from the sick room. The concerted effort of doctors throughout the years has brought about this result. After we all became intelligent enough to understand that armament can be controlled by more powerful armament, prayer for peace will cease and we will build what is needed to insure our safety. It will be a prophylactic measure just as we administer typhoid serum to the boys before they start from home.

But some preachers make us doctors mad. They sometimes use such little sense in presenting their wares. Whether they deliberately falsify facts because of their nature, their training or whether they knowingly state things that are not true in the utterly mistaken idea that it will boost their cause, the efficacy of prayer, which ever it may be, one of the most aggravating instances of misapplied salesmanship appeared in a recent issue of a prominent church paper. Because of the prominence of the doctor involved I quote it. The scene is set in a hospital. Characters: minister and a doctor. Doctor shaking his head and wringing his hands just as overwrought doctors do in the movies, but never do in real life. Minister sleek, dignified, fresh from his afternoon siesta, bulging with zeal to show up the heathen doctor:

The paper quotes the clergyman: "The patient could

not live. Medical science had contributed its all, and it was not enough."

"Dr. William James Mayo left the sickroom, grave and beaten (shaking head, and wringing hands—see scenario). Waiting outside was a minister; the spiritual adviser of the sick man. He saw the gloom on the physician's face and it needed no interpretation." (Where else can a doc wear his gloom?)

"'It's no use, Reverend,' (sic) Dr. Mayo said, unaware that the clergyman had been watching him closely. 'It's just a matter of few hours now.'"

"'Let me see him once more,' the minister pleaded. 'Let me pray with him again.'"

"'Of course. Perhaps you can bring that sick man something I have been unable to contribute.'" This imaginary statement from the headshaking and hand-wringing doc.)

I quote the minister further: "When Dr. Mayo returned to the sick room an hour later, the patient had rallied. His (the patient's) pulse was stronger, some hidden spark had burst into flame (Note this is figuratively speaking and does not refer to the burning bush). In another hour the crisis was past (Ministerial prognostication). Next day the patient was on the way to recovery." (We are already told the crisis was passed yesterday). "Dr. Will marveled," is the final summary. I have no doubt of that and if Dr. Will sees this tale from the Elysian shore he will not only marvel but will have a hearty laugh.

Of course that is all moonshine. It is a slander on the name of a great doctor. When a great doctor says he does not see any hope, the patient will die. He makes sure of it as indicated by the course of the disease before he issues such a gloomy prognosis. That is literally true and anyone who wishes to give that a facetious turn may do so. Does that minister believe

that any doctor is such a fool as to fall for that tall tale one single second? I venture the opinion that it is a dishonest attempt to boost the idea of the efficacy of prayer and can only cast undeserved contumely on honest ministers.

No doubt many readers of that paper will cite that as an example of the efficacy of prayer. It in the end will do more harm than good. More harm than good because some poor deluded person will depend on the efficacy of prayer to the neglect of the measures medical science has to offer which might rescue him from his disease. Many patients die because of mistaken faith in prayer in everybody's community every year. Everyone knows such instances. What responsibility do those who have taught the efficacy of prayer have? Many teach the efficacy of prayer who would not think of depending on it as a substitute for medical services if they themselves were sick. I am proud to say that I have been allowed to serve many hundreds of ministers, finest men in the world, but when they are sick they tell the doctor where it hurts.

The ideas of people have changed for if possessed of a pain they come direct to the doctor leaving the minister out of the picture entirely. If a minister gains access to the seriously sick or dying patients he must muscle in. I cannot recall a single instance in which the seriously ill patient asked for the services of a clergyman. Of course there must have been such because I have heard tell of it. The facts are some member of the family, generally an old aunt, acquired by marriage, thinks the sick person has not been among the faithful or has been worshiping at some devilish shrine and is in urgent need of reconditioning. In most instances the minister has the patient's name on his register. Seems to have a feeling that his job

to date has not been entirely trustworthy and requires amending. Really it looks like politics to heathen docs.

Ministers should remember that sick folks are not interested in dying. That positively is the last thing he intends to do. Obviously so far it is the last thing he does. I have never yet seen a patient who realized that his end was near who was not willing to face the River Styx on his record. Saint and sinner die exactly alike. One of my best friends once wrote me: "The only time God ever showed mercy was when he invented death." Fate is kind; when the end approaches the circulation slows, edema settles in the lungs and brain, and the curtain is slowly pulled across the picture of the world. Viewing such scenes it is easy to feel that the spirit took its flight, leastwise we know that the unknown thing called life has ceased to be.

V

PSYCHOLOGICAL EFFECT

One must not in all fairness overlook the psychological effect of prayer. I mean here the psychological effect of the "Give me" type of prayer.

That constant vocalization that there is no pain does help assuage the pain is quite possible. When one has a pain and there is no remedy available one tells himself that he will have to "grin and bear it" minus of course the grin. The faith in the efficacy of prayer is dependent on who has the pain and how large the pain is. We see this illustrated on other occasions. Else why will a large man with a small acute stomach distress insist in telling all and sundry of the great pain he has or had. It is interesting to note that the conditions may be reversed. One has a severe pain and denies it—the dance begins at 9 P.M. Hurried call at 5 A.M.—too late, a ruptured tubal pregnancy. Autopsy proved the diagnosis.

One having a small pain gets relief by exaggerating the importance of it—the other minimizes it in order not to miss the dance. In either case it is not difficult to see that the laws of nature progress according to nature's laws uninfluenced by the proclamation or lamentations of the victim. Patients may fool themselves but they cannot fool the disease and not often the doctor.

Sometimes medicine comes into consideration as the last resort. I once had a very fine pious old patient who sought me out early one morning stating he had been unable to sleep for several nights. He stated his predicament as follows: "I have tried prayer, I have tried whiskey—neither helped. I want some medicine." The medicine worked.

Patients do not realize that the doctor estimates the patient's suffering not by the array of adjectives emitted but by the facial expression and particularly by the tone of voice. Judged by these means I am willing to admit a strong will or a large prayer may relieve a small pain the duration of which is limited by the natural history of the spasm. At least vocalization helps to pass the time more quickly. A man with a strong voice can out-talk a gall stone colic the limit of which is about one hour.

We doctors see much of the serious, the pathetic side of the hopeless trust in prayer. I have seen a number of patients slowly dying of a cancer stoutly maintain that they have no pain in the presence of a "healer." Yet when the wise doctor administers a hypnotic the look of gratitude on the patient's face as the drug gradually controls the pain is one of the most interesting studies in the psychology of the sick. The person who admonished them to say that it did not hurt, that there is no such thing as pain, caused endless, needless suffering. It is the height of cruelty. In cases of hopeless cancer, for instance, we can relieve

suffering. To deny the victim this surcease from pain is diabolical.

VI

PRAYER AS A PUBLIC MENACE

There is a more serious aspect of prayer which is not negative. Prayer may be a soporific serving as an excuse for doing nothing. God will provide; believe and it will be all right. Just now we are powerfully reminded that the nation was taught to pray and to keep on praying and we would have peace. Why are the people encouraged to keep on praying while the futility of it is so evident? War has come and found us pitifully unprepared. Are not ministers afraid intelligent people will realize that there is no peace and will lose confidence in the whole scheme of prayer? It has been said the church is a despotism, governed for the benefit of the church.

Prayer helps to keep the mind off of unpleasant things and keep us pointed in the direction which those who govern us want us to head. It was but a form of politics. Collecting stewpans, old paper, old rubber, are means of diverting the attention from the truth. When our boys were drafted the mothers were assured that Sonny would never be asked to fight on foreign soil. To divert the attention of the mothers by asking them to give up their stewpans is futile. Mothers are thinking and thinking hard. When the boys return home the mothers will be thinking what the boys are thinking now. Both prayer and politics may be questioned as they have never been to date.

We may assume that some believed that collective prayers of the faithful would produce results. Now everybody knows that prayer to prevent war did not work. Ignorance may explain the past yet they are invoked again to salve a small conscience which

feels something should be done. It is a pleasant way to escape one's duty.

Let those pray who can do so sincerely but let us evaluate it at its true worth and in the meantime build tanks and airplanes and keep our iron at home, just in case prayer fails the next time as it has failed in our present hour of need. Prayer or no prayer, we should know by this time that peace is only the period between wars. The old adage "In time of peace prepare for war" should supplant or at least supplement the prayers for peace.

When my neighbor prays while I work I have a right to ask him what evidence he has that his effort is equal to mine as a contribution to our way of life. Do I benefit as much from his prayer as he does from my honest toil is the question. The person who accepts the security the fighting boys bled for but refuses to contribute is a discredit to his race. If only those fight who want to fight we would be gloriously licked. Real men do what needs to be done whether they like it or not, as our boys are doing now. To sit at home and complacently wait until the boys come back expecting to share their victory is simply moral cowardice. Conscience and cowardice are not synonymous terms.

As a preventative of war, which is the subject now at issue, it is a petition to God, of course to the God of Moses. The Moses concept we have seen is so ephemeral and elusive and surrounded by mythology that it is hard to form a mental image as the object of our supplication. It seems so like petitioning a Congressman, both an actual and ephemeral concept, to whom we appeal realizing from experience that the only thing accomplished is to relieve a congested spleen. Spiritual communion with meat and potatoes puzzles one's understanding. I cannot escape the conclusion that "spiritual communion" figured in terms of practical results are just two words. One is compelled to

ask what the spirit we use is and how we can mobilize it to gain the object sought for. To petition the God of Moses for peace seems futile. The God of Moses according to the records likes to see whole races exterminated. There is no evidence that his ideas have changed. One of our most distinguished divines speaking of prayer wrote "God is not a cosmic bell-boy for whom we can press a button and get results." Then why we should be pressing the button when we want peace is a mystery.

Obviously our ecclesiastic governors are not a unit. Just now our church papers are busy alibing for their God. Why does he allow this war to go on? Prayers for prevention have been forgotten. The consensus of the replies I would paraphrase into something like this: "We have been such fools God is going to have us suffer so that we will come out of it with more sense." Of course it would be sacrilegious to note that is giving vent to too much hope. It has never worked out that way in previous wars.

I will not assume that anyone is so dumb as to believe prayer will prevent war. At no time in the history of the world has the church, or its representatives, prevented war. One recent author has referred to those who encourage their fellows to believe in prayer as a war preventative measure "as traitors to their people." Prayer for preservation of peace reminds me of a colored person observed fishing in a small puddle at his doorstep. A neighbor reminded him that the puddle resulted from the night's rain, hence there could be no fish in it. The fisherman replied that there being no fish in it, chances were he would not catch any but he continued: "This is so convenient."

But I believe that is putting too much responsibility on the clergy. Really I do not believe anyone takes them seriously. Those who dance along in blissful indifference do so because they are blissfully indiffer-

ent, thoughtless and careless of the threatening nations about us. The clergy should remember this: Prayers are not answered unless there is somebody around to produce that for which they pray. Who do the clergy think will answer their prayers? Not the God of Moses. If Moses, that inspired party, views this conflict from the Elysian shore he will realize what a piker he was. The answer to prayers for peace will come from the result of those who have builded our armaments, and our boys who are using them. These facts are so obvious that one would think any honest man who has only contributed the exercise of his vocal organs would shut up.

VII

IMMORTALITY

The most interesting thing in the study of the human race is that all the primitive people have a feeling that death does not end all. They cannot believe, they do not even know that there is any such thing as knowledge out of which one can fashion a belief. They just feel!

It is of supreme interest to note that the opposite pole of the human intellect comes to the same conclusion. After all his pursuit of knowledge studying to understand the workings of the laws of nature the scientist comes to the same conclusion. He just feels that death does not end all. I have discussed this in the chapter on the God of the Scientist and it need not be repeated here. I need but summarize here that it is possible for each person to build in his heart the kind of God he needs to satisfy the cravings of his own soul. Here this chapter had best end.

But it cannot end here because our civilization is so sur-charged with beliefs which so confuse the world at large that everyone should learn to view the ques-

tion of salvation and immortality as now taught, in its true light.

Immortality according to present viewpoint is essentially a New Testament idea. The Old Testament does not refer directly to life after death. They were too busy having a good time with their miscellaneous assortment of ladies to be able to envision a more happy state. Or they were too busy administering death to others to worry about what comes next.

What do we know? Is there a popular demand? It is a concept the church needs for its influence and perpetuation but what else it means is not so clear. Paul used it as the most successful sales talk that we know, but what are the facts? The essentials for a salable article are demonstrable need and cheapness. Yet we are confronted by the painful fact that in 325 A.D. there was a convention at which it was agreed what should be taught the yokels about not only the birth and crucifixion of Jesus but also the teaching of St. Paul. A friend told me about a convention held in a Chicago hotel room which resulted in the formation of the ill-fated Bull Moose party. Same thing, bull all. Each changed the course of history, the one the church as it is today, the other, World War I which in turn became World War II.

To achieve salvation I am told I must believe. I am a scientist. I cannot by the exercise of will make myself believe. I cannot earn salvation I am told. My fifty years in the practice of my profession will only land me in hell. All right, if that be the truth, where is it I land? Who said I must believe? Paul. I know a lot about Paul and I believe God knows a lot more, so what he said does not worry me. I have many grateful patients gained in a lifetime effort to answer my own prayer, the welfare of those who trust me.

Since my childhood I have heard about the prime

importance of saving one's soul. That is selfish, it offended my child mind. How important, I ask any man, is the importance of saving his soul in the great conquest of a universal brotherhood? All this moaning about and loud vociferation declaring your joy in the assurance that your soul has been saved taking effort away from what should be expanded for the common good. What I cannot understand is what all the fuss is about. The faithful believe in a just all-powerful God who has our hairs counted, but cannot be trusted to deal justly with us at our deathbed. Why is it necessary to tell him how much we love him, how we know we are saved by grace, and so on? Why it would be more reasonable to say simply: "God, you know me; I trust you."

If in our consideration of life after death we look to science, we are left in the cold. The scientist humbly says that science teaches that death ends all. All what—well life—but what is life? Oh yes, life is the stuff that originated in a super-heated pond a long time ago. Particles formed after a time dividing into a nucleus and protoplasm. There was a cell like an ovum. From now on the sailing will be easy, except we need to explain how one set of cells got to developing vegetables, including cabbages, while the other kind developed into the kind that moves when evolution got into the scene, and which culminates finally in us, the human race. That certainly clarifies the atmosphere except for the fact that we are in total ignorance of what life is, how it came into being and what is the end.

When it comes to explaining what happens after death, not knowing what life is, science cannot know what death is. It takes one back to the infinite author of the universe, symbol of God. Believe what? What Jesus of Nazareth or the Christ of Paul taught of course, but all we know is what someone said he

said. It is all so mixed up with Old Testament mysticism that we have an uncomfortable feeling of doubt. Who knows what death is as well as those who face it often? One can learn more about what is unknowable at the bedside of the dying than he can learn in all our philosophies.

The most understanding friend I have ever had, a frail little man, uneducated; in the experiences of life we had little in common. Never of good health, he was ailing, but not much. One evening he said to me calmly "Twenty-six years ago you sat the night out when Blanche (his wife) went away. Tonight you can sit me out. I'm going to see her." By morning he was dead. Dead, no—he just ceased to live; technically speaking I do not even know of what he died. In such cases even a careful autopsy fails to reveal the cause of death.

Science, religion, reason leave us in the face of the question of immortality. If you feel it, that is all there is to it. The less one says about belief, the better. Faith is what Pasteur said he had; faith in the future life, something aside from his science. The teachings of the Christ of Paul are only the report of a bunch of ignorant persons told in the language of mysticism. I had rather listen to the last words of my patients.

But there is a more definite kind of immortality. Everyone's life lives after him, some more than others. Many men still live in a big way so that everyone can see. Koch, Pasteur, Lazear, they rid the world for all time of infectious disease. An infinite number of persons have done work which will never die, though the luster of it may not be great. The attractive feature of this idea of a future life is that it encourages us to do the best we can.

This is not far fetched. No one can ever know what his influence on those who come after him will be.

Pasteur's father was a tanner. Obviously his life would not live after the boots made from his leather wore out. He had a son just born after the natural course of events. The old tanner's son Louis will never die. The old tanner? If he did not achieve immortality he at least started it in the life of his son. Or Mama Pasteur. If her Louis was born in sin he was too busy all his life to practice it.

Any man after a lifetime of honest endeavor leaves something. It may be small, so small nobody notices it but even small things may be immortal. It seems to me that the safest plan, viewing life, is to advise our young people to strive for this sort of thing. Try to achieve immortality. Try to live a life that will leave something that will never die is better than to say they believe. It is a lot of fun to try and if you fail in your effort there is always the possibility that something may be achieved through the child at your knee as happened in the case of Papa Pasteur. Perhaps if one tries you may be as fortunate as that papa, the tanner.

Is it sacrilegious for a young person to say "I am going to make myself immortal, find a new idea that will not die, or raise a baby who may find out the cause of cancer?" Better this than to trust the teachings of a Saint who started out because there was something wrong in his head.

We do not know the genesis of the idea of immortality. All peoples have a belief in immortality. Baring-Gould notes that to form an idea requires some effort, the belief in immortality requires none. As noted above all peoples as revealed by mythology and history have funeral rites which signify a belief in life after death. Considering this primitive belief common to all people one may think that there is inherent in the human heart an instinctive something, that is a be-

lief in immortality. Your morning paper will have a picture of a person who has "passed on," supposedly to heaven. The page in the paper presenting this sad announcement will be garnished with legs of beauties like lettuce about a baked apple. The papers know the interest of their readers is in the living, not the dead, in legs rather than in a future life. The expression "passing on" is a happy one. There can be no quarrel, anyone can formulate his own idea as to where. Certainly few people give heed to what comes next except in a theoretical way. There certainly would be a revival in the church if the members were as much concerned with a future life as they are about their wives and babies. Many persons say they believe that they are saved but it does not show and one would not suspect it if it were not proclaimed.

The idea of immortality is bound up in what is the noblest in our lives, something that works within himself, his conscience. I believe Fichte was right when he said we cannot love an object which we do not regard as eternal. Better said: What we love is to us eternal. This I believe is the fundamental factor in our belief of eternal life. We just feel that we shall meet the departed one again. Life would be intolerable if we could not find comfort in this thought.

But there is a more profound and more beautiful phase. I once heard, as a young doctor, a simple woman say that she had held her departed child on her lap hundreds of times since its burial, we had all seen the child buried, and in telling it, she exclaimed "... but I can't touch it, when I try, it isn't there." Obviously the child lived in her memory and for her that was eternal. We are told that is purely a memory manifestation and is no evidence of immortality. That is all very well to tell those who have not held their baby and seen it die. You can talk to them but you can't

touch them yet you know where they are. Is that not evidence of immortality?

As a final summary I would repeat, why not teach the young that instead of resigning themselves to the acceptance of eternal life by the simple act of saying they believe, accent the alternative thrill of toil, charged, with the spirit of imagination, that they may strive to create something by their own efforts, some act that will never die, like a baby who never shall hear of sin. Anyone who can debunk the belief in congenital sin I would accord immortality along with Jenner who discovered how to control smallpox, the most loathsome of all diseases, by vaccination.

There seems to be a drifting among thoughtful people toward the belief of Socrates: "One knows not whether death be not the greatest blessing to man." I have been surprised throughout the years to meet many men of highest intelligence who would like to achieve oblivion. Likely they feel as the distinguished scientist quoted elsewhere who observed that he cannot wax enthusiastic at the prospect of dancing eternally about a throne. In fact I get a chill when I think of that possibility. Suppose I should meet the rapist I autopsied after he was saved and hanged, all within an hour. Oblivion then I crave, but I have a memory I feel will never die. Believe, pray, work, whichever seems most acceptable. The happiest men I have known in the sunset of their lives have chosen the work route. Whichever way one choses, in the end there is death awaiting you.

Of a future state we know absolutely nothing. To speak of playing a harp and walking the golden streets is silly. The shrewdest observation I know came from a four year old girl. She asked her mother if there were cats in heaven. The mother replied, "Certainly not, what a foolish question." Then the little Miss

countered with a very natural question: "Then where do the angels get strings for their harps?"

The greatest handicap to belief in a future life is the lives of those who specialize in selling the idea. What they do to gain our confidence escapes me. Sects fighting with each other, boiling in the most seething hate today, all going to the same God. But the tangible result of what they teach makes us doubt their whole premise. They should show us something that will convince us that they believe what they teach. The only thing they present us that never seems to die is hate. They have failed us in life and we cannot trust them in death. To them the manner of life is of no importance. The noble man goes to hell if he doesn't say he believes, the criminal is saved the moment he reaches the end of his rope. Where is their justice? Character with them does not count, morals are ignored. It sounds like the "mouthings of groundlings" as the Bard of Avon scornfully said.

My lamented daughter left me the best philosophy of life I know. It is "We cannot know about a future life. All we can do is to do our very best, and then take what comes." It is this spirit that writes these pages; it is the striving for life eternal.

Should it not mean something to us when, as quoted elsewhere, one of the greatest intellects of today says as a physicist he cannot accept the corporal resurrection of Jesus, and thereby blows Paul off the map, yet closes his book with the following lines:

And so at least, it may be you and I
In some far azure Infinity
Shall find together some enchanted shore
Where Life and Death and Time shall be no more
Leaving Love only and Eternity.

CHAPTER IX

BEGINNINGS OF THE CLERGY AND OF THE PHYSICIANS

In the beginning we, the clergy and doctors, were not two professions. We were equally ignorant and in that ignorance we were not divided. All we had was intelligence but we were so dumb that no one realized he was dumb. The dispute between the kettle and pot had not yet arisen. The reason is plain in retrospect. No one in his current state realizes he is dumb, and he does not envisage a time when he will be looked upon as being dumb. But most likely future generations on looking back on us today will do so with amused pity. I believe this because I have lived from the horse and buggy to the airplane in transportation, from sulphur to the sulfa drugs in therapeutics.

But we are here interested in tracing the development of our two professions into distinct entities. From that simple beginning one developed a clergy and a church united only in the pursuit of salvation of the soul but differing endlessly in the theory of achievement of that end. Did Browning have this situation in mind when he wrote: "Whose life laughs through and spits at creed, who maintains them in word and defies them in deed." On the other hand we have a united medical profession engaged in the conflict against disease, against human suffering and death—life of self for the life of others has been its motto. To trace the diverging lines from their beginnings at a time when both were steeped in ignorance, to our present status when one is a religion, the other a science, is the fascinating problem of this chapter. This draws the line between us at the outset. A vote as to which is the pot and which the kettle will result in a tie.

As noted above, even from the beginning man was

intelligent. The power of speech is accepted as evidence of the dawn of intelligence. But despite the fact that he had intelligence he could not figure things out because he had no facts on which to base conclusions. He was in the childhood of the race. Intelligence alone does not enable one to think, he must have facts to compare with other facts if his conclusions are to have any semblance of verity. The neglect of this obvious difficulty has stayed with us clear down to the conclusion of the last chapter of this book, in human history to date. We are confronted by the fact that the race learned to talk before it had facts to think with or about, hence it talked nonsense.

Therefore because man had no facts it came about that everything that happened to early man was supernatural, there was no other fact with which to compare it, that is everything was something beyond himself. The supernatural was therefore only more confused by his attempt to think his way through without facts but unfortunately he could talk. It is a funny thing, we speak of a person being dumb when he cannot talk when as a matter of fact speech is the agent that proclaims dumbness. The old inspired boys when on their good behavior talked. All that man knew to do for the sick person was to resort to stunts which today would be classed as quackery or as psychotherapy. But as we view them in the light of the present day, priest was doctor, and doctor was priest, the two together knew less than a four year old child today.

Both dressed in bizarre and fantastic garb and made a great racket. If the patient was impressed he said he felt better.

That is where doctors made their great mistake. As Haggard points out the doctor's first step was a false one. Being ignorant he wandered in a maze of myth-

ology and in consequence for hundreds of years he fought a sham battle. Being ignorant he was led astray by belief, what he believed was false. That is the fundamental thing that guides a doctor, after a long painful experience he learned that believing a thing does not make it true. It took a long time but he learned it. As a corollary to this it followed that when he discovered that which was written down and he had believed was true but was not, he discarded it. He could do this because it was his own fool idea. He cast off the fantastic garb with as little compunction.

I

Somewhere along the line, centuries before the World was created, somehow the primitive mind got the idea that the mysterious forces about him could be influenced by sacrifice. It may be noted here that Mr. Primitive Man did not keep a good record in order to determine if the sacrifices he made got the results he sought. He made up his mind beforehand that what he expected to happen would happen and that settled it, he said it did happen and he believed it. Some of our brethren when they made a sacrifice and it did not work out and the patient died, he knew something happened with his belief.

Among the American Indians they called us medicine men but to them he is priest too. The reason is perhaps they call him only when they are sick. They fit the modern pattern—people call doctors only when they have a pain. Otherwise the Indians look on spirits as something intangible. The doctor was supposed to act as priest only in so far as he could influence the spirits.

However after a time we developed to a point where one could tell a priest from a doctor because the smarter of us became priests. Still we lived together as brothers. We both dealt with spirits, demons, ghosts

and witches. We dressed alike and made the same kind of racket.

One can say in general that the clergy just out-talked us, they told just how the supernatural worked. It was not until the world was created that the clergy fortified their position with a lot of revelations from inspired sources. Since Moses' Story of Creation they have had a fixed point of authority. This gave them a great advantage over us but it has made them a lot of trouble later on, in defending their position which revelation provided which could not be proved.

We doctors on the other hand have had no fixed point. The doctor's revelations came from a higher authority too but we have to dig our revelations out one at a time. Unfortunately for many hundreds of years we did not find out anything. When he thinks he knows something and the patient dies, something is revealed to him. A higher power, death, has told him he was wrong. Because of this we were compelled to progress by trial and error. That is, no doubt, where the popular expression "practice of medicine" had its origin. But by this means we reached more and more a science, first art dominated, now art has receded to the task of applying to the individual patient what science teaches. We have had our troubles because we have much trouble in understanding what we know. What the science of medicine is and what the relation of any individual doctor is to his patient varies greatly.

Yet in final analysis this method of approach is the key to what has separated our professions. The clergy got their information by revelation and if what that presented to them did not suit they would have had to defy the author of that revelation, which nobody did because it is all written down and it is necessary either to defend it or to admit that it is poetry. On the

other hand when we doctors found something out of harmony with experience all we had to do was to kick ourselves in the face and try something else. Therefore the one built on belief, the other on trial and error. Even today in spite of increased knowledge neither professions know enough to quarrel about. But our aims and achievements are far apart; the great abyss lies unexplored before us. In the beginning the clergy knew nothing about a future life because it was not *yet* written in the Book. The Book is the thing that furnishes the foundation of their profession. The doctors on the other hand deal with life and death but if their life depended on giving a definition of either they could not make a sound.

The idea we had of waiting for facts before we made conversation worked to a great disadvantage. Before we had anything to talk about the clergy had words spread all over the known universe. Though they did not know what life or death is, no more than we doctors did, they demonstrated in great variety and in great detail just how each is brought about.

Thus it comes about that we have become so divergent that it must be apparent to everyone that the time has arrived when the human race must take stock of the practices and beliefs of us learned persons. It is time we both laid our cards on the table and asked the world to sit in and take a look. The fact that the clergy wrote so many things works to his disadvantage now. Ask a clergyman how life begins, it makes him mad. After going into great detail both in prose and poetry he presents an entirely different theory. The question is an affront because anyone should know that he read it in a book. So the doctor reads in the book and he just can't get the point. He has seen death and to him it looks as if they stay put. So ask a doctor to present his achievements and he will rather

shamefacedly say that he does not know but at least now he knows more than he formerly did. In any dispute, say in a consultation of doctors, one talks like he knows all about it, the other says he never saw anything quite like it. The latter loses the confidence of the patient. In the doctor's willingness to admit that he does not know lies the difference between the two professions.

II

So it came about that for a long time the clergy treated us doctors something scandalous but we have reached a state in which we have our own place in public opinion and can and do talk back. Perhaps it would convey my idea if I said the time has come when if a person has a pain he must choose which he shall follow, belief or science. When he is well he chooses belief but when he has a pain he seeks science. For a long time he took no chances, he called a minister and a doctor. It then took two men to take the place of the Indian medicine man. The cause of the separation of our professions was not sufficient to bring about this wide gap. We doctors worked each for himself, made his own private guess as to what was wrong with the patient, because nothing was written down. Along about this point the clergy realized the disadvantage of playing a lone hand so they became a church and by virtue of organization really began to do things. Just when they began to call themselves a church is not clear. It will take several chapters to present my acknowledgment of the wisdom of an organization. I note here that the Church built hospitals long before we doctors had learned enough to do patients much service. But the Church had a lot of trouble and finally got rough and quarreled among themselves. Of course we doctors have our little spats but it has never become organized because we did not care whether the other

fellow believed as we do or not because nothing was written down.

Whether the beliefs of the clergy have delayed our progress in our relations of man to man, our striving toward a common good, or have aided it, is the question. We doctors have never been organized in order to secure influence. The result was when the clergy consigned doctors to hell it was the opinion of an organization. On the other hand when a doctor told a clergyman where he could go to it was optional and was an expression of private opinion. Therefore because of their lack of organization, in comparison with the clergy, we doctors have been of some use to the commonwealth only as it is made up of individual persons. But please note this: each doctor was responsible for his own deeds, the clergy were complacent because they were only representatives of an organization which in turn was the general agent for something we doctors know nothing about. Their business card we may imagine read something like this: Salvation Manufacturing Co., Represented by S. T. Paul. On the other hand the doctor's card read: S. Q. Lapius, M.D., Practice Limited to the Skin and Its Contents.

It is a common joke that doctors do not take their own medicine. That is not quite true but it is a fact that oftentimes a doctor would rather bear the ills of the patient than take the medicine he prescribes, nor do the ministers. It is a matter of common observation that no matter how secure an individual minister is in the promised salvation he is in no hurry to achieve it. He is not anxious to try his own medicine, any more than we doctors are ours. That is a very fundamental fact. No matter where the individual is bound, even if he has a ticket bought and paid for, the whistle of the boat on the River Styx gives him a fit and sends

him to the doctor. The minister is no more anxious to go to heaven than a doctor is to go to hell. One would conclude from this that neither faith nor fear has very much influence on our lives. They both envision undiscovered countries.

We have now arrived at a point where the fundamental question is bound to come up as to which is the more important, the physical and mental weal of mankind or the saving of souls. Our common good demands a world at peace, no matter which we place first, soul or skin. In peace the first is the more important, in war the latter. That is strange for theoretically the reverse should obtain.

There should be somewhere a common ground where we could dispassionately compare our achievements. Of course the clergy promised us the care of the spiritually distressed, but the fact is the clergy seem to be more distressed than their patients. But I will say the clergy might care for the mentally befoozeled but not organically sick. We doctors waste a lot of time when a patient complains of indigestion and thinks he has ulcers. After careful study we discover he has a concubine hidden somewhere who wants an increase in wages. The clergy have it all written out about the concubines and find the diagnosis easy. By this arrangement the clergy could take over the foolish wards of our hospitals and hear nothing more preposterous than that which they read in the Old Testament and preach about. Suppose a minister announced that his morning discourse would concern patient eight in ward six, and the text something like Acts 8: 7: "Verily he declareth he hath swallowed a large fish, greater delusions than this hath no man."

This would be quite in line with previous endeavors for judging from the past the clergy wanted to put us doctors in the foolish wards because anyone who elect-

ed to save the lives of others and lose his own soul certainly had something wrong in his head, sounds logical all right. If they work on that idea for a few centuries they may find the answer to the age old question "Who is looney now?"

Reference was made above as to the relative importance of salvation hereafter and safety here. But the matter is not so simple. An individual may find himself on a perfectly satisfactory peacetime basis. One day his porcupine grows restive. This gives him a spasm in the outlet of the stomach, a pylorospasm we say. This results in an ulcer, this ulcer may perforate producing a generalized peritonitis which will most certainly result fatally, that is unless a surgeon sews up the perforation. Thus this fabled person skates along between the two more or less rebellious professions.

III

It is my purpose to plead the cause of medicine, sometimes as an art, sometimes as a science, sometimes as neither, generally both. Medicine has been my life and I write with conviction, if nothing more. Leastwise I am still practicing. I realize I am a self-appointed attorney for the cause of medicine before an unfriendly judge and before a prejudiced but I hope intelligent jury, some doctor's patients. Leastwise when the people are sick or were once sick, or foresee a time when they may become ill, they have a sympathetic ear for the doctor. This is speaking of the church as an organization which still opposes us because we ask about what is written in the Book. Funny parallel there. An old doctor does not hesitate to say he does not know but a young doctor would never think of admitting a lack of knowledge. It is more trouble to defend ignorance than wisdom based on experience. Be this as it may we do not worry.

The individual of the street and even the clergy individually are our friends and know just what to do when they have a personal pain.

Education and knowledge have not removed the human race from the bonds of superstition and mysticism. That is true of both our professions. We are warned that mysticism is not religion. Perhaps it was sired by altruistic thought but certainly it was and is hemmed in by mysticism. The church is dominated by mysticism; medicine still has some traces of it but realizes there is no sense to it and is shedding it as fast as it can. We no longer say "Spirits or demons cause your disease." We tell you just what caused your trouble, like tuberculosis, or we will confess we do not know, like influenza, but we confidently expect to find out. In the meantime we quarantine, not from evil spirits, but from others who have the disease. Even ignorance when recognized as such can be made useful. Then why do the two allegedly learned professions carry ignorance along? That is the problem confronting us. The answer is of course that we do not recognize it as such or recognizing it, find it so essential to the perpetuation of our life purpose that we protect it and will protect it to the bitter end, for to abandon it would lead to exactly that, a bitter end. Of course in present day language we would say intelligence is rationed and there is only so much for each of us.

We may go back to the beginning of time when medicine did not exist as a science, not even as an art, worth mentioning. Everybody did just what animals do when they are sick, hide away to die; when wounded they lick their wounds in solitude. Primitive man did the same, neglected and unhappy as a defeated candidate. At some time in the course of development these predicaments of primitive man attracted the attention of a fellowman and the germ of sym-

pathy was born; he offered him help. There was born the altruistic feeling, one of the necessary elements of a moral sense, the moral sense that produced the doctor. Where he got this idea is the fundamental question. When one of the lower animals sees another animal which is foundered or sick he goes by on the other side. Man stopped to inquire if there was any 'thing he could do to help, that is he did after he saw a dog lick the man's wounds.

Physical help chiefly but that very act that the dog brought him applied human sympathy. The person who first had this feeling of sympathy may have been a minister, actually was, whether he was ordained or not. Here is a fundamental question which needs revealing. Whether this sentiment evolved within himself or it was the product of his mystic belief is the basis of a difference of opinion. The dog learned by experienced that licking a sore was good medicine, it softened the scab so the epithelium could spread more rapidly. Good for dog, therefore good for master.

We doctors think that, like conscience, the desire to help most likely evolved from within the individual though we do see in the primitive doctors mysticism in a most grotesque degree. There is another possibility. The Indian medicine man, as the colored mammy said, is very costive, and the fee had to be agreed upon before he started his racket. Therefore whether the racket was produced to justify the fee or because of an altruistic feeling is a question. Even the dog we are not sure about. Perhaps it licked because it was its own reward.

While there may be doubt as to the genesis of the elemental urge there is the record of achievement all to the credit of the medical profession. Starting from this premise is what makes medicine an interesting study, because here evolved in spirit the first doctor.

He had a good start for he got the elemental idea that the first thing a doctor must have is a desire to help the patient. In other words the altruistic idea of life of self for the life of others was born here. It was mandatory that he do something.

Theoretically the first purpose of the clergy is to secure salvation for others but to secure this self sacrifice is not required. It can all be done in the daytime while the weather is good. The clergy obviously are assured salvation. They get their self assurance out of the language of mythology existent long before the Hebrews brought it to where they did. So it comes that the first purpose of the clergy is to preserve mythologic things so they must hinder the advance of knowledge in order to perpetuate things mythological. The formula is really very simple to a bright doctor.

The first evidence that certain men assumed the responsibility for his fellowman's ailment is found in a painting in a cave in France. It represents the doctor dressed up in a fantastic dress, and he danced. He was a sorcerer, in other words he was a quack, we would say today, because we have now shed our robes. There is no evidence that he did the least bit of good, but the people thought he did. So the fact that he did no good did not make him a quack. It was just a question of robes or no robes. That is getting too close to home. Here was born the delusion, still existing, that any kind of doctor is better than none.

IV

Just when anything rational first came into the healing art to definitely separate our two professions, is difficult to say. Osler places the approximate date at four thousand years ago and the place on the banks of the Nile. As early as the sixteenth century B.C. is the first definite date given. Both papyri and stone hieroglyphics are in agreement on this point. There

evidence begins and myths start to gather up their robes.

The god Thoth was the author of this early medical lore, we are told. We find here some intelligent observations on the use of remedies. The gods gave directions to the Egyptian physicians which they were compelled to follow on penalty of death if the patient died. Osiris and his wife Isis were the deities in control. Just what the relation of this estimable couple to the god Thoth was I cannot make out.

The dictators being gods naturally the priests had the advantage over the physicians. That was taking an unfair advantage of the doctors. They appropriated all the mysticism for their own use. All we know is that the priests were of two classes. The higher order confined their efforts to conjury, prayer, charms and revelations. The lower classes of the clergy were assigned more menial duties involving the soiling of the hands such as was necessary in the preparation of drugs and the performance of simple operations. The lower class of priests really were more closely allied to us doctors than to the higher order of priests. It is unfortunate that this fact was not recognized. I opine that if this class had known where us doctors were going in history of civilization they would have climbed onto our bandwagon. The regular doctors evidently were not highly regarded in that early day because they were classified as military doctors, and horse. Thus early we professional brethren were categorically classified by the gods, to the disadvantage of us doctors and as above noted to the advantage of priests who did the classifying.

Later when more unpleasant toil came in the doctors came into their own. Though the tasks assigned to them were menial it gave them a chance to show what they could do. A knowledge of cupping, venesection, circumcision, cutting for bladder stones, and other operations, also trephining, the latter supposedly

to let the devils out of the skull. Doctors did this on order from the clergy. That was an imposition. The clergy put the devil in people's heads and it should have been their job to let them out. This is explained by the fact that trephining a skull is hard work.

The value of these observations is to be found in the fact that some of the drugs still in use were employed at that time, notably opium and squills. Others of less potency were in use such as onions, caraway seeds and various citrus fruits, centuries before vitamins were discovered. Along with this they used various things, herbs and all sorts of impossible, even revolting substances, such as spinach and stewed tomatoes, and used local applications of many poultices. Even these were a great improvement over the incantations. I hasten to admit many things doctors did were harmful, in which case incantations were preferable. However out of this developed more effective measures, local infections were incised, scarifications and leeches were applied to inflamed areas. Leeches, I hasten to explain, were not quack doctors but a sort of worm employed to abstract blood from inflamed areas. Styptic powders and compresses were used to control hemorrhage. These things indicated a definite trend away from mythology, but still the clergy did the talking and the thinking, if any, and the doctors did the unpleasant tasks like applying poultices and sucking boils and making night calls. In other words the relation was much as it is now.

With the discovery of the efficiency of the drugs above noted, we can say medicine began. It was the discovery of the potency of these drugs that separated the clergy and the doctors. The discovery was scientific and not religious because the data collected was based on how the patients got along after taking the various drugs, independent of any conversation that may have been added to the treatment. This scientific method

is our final checkup today. Results, demonstrable, is the final judge.

At this point the doctors got a following of their own. A person possessed of a pain went to the doctor first and the amiable relationship between our professions became strained. The quarrel came about, as it does today, as to who gets the credit. In my early experience the clergy prayed, the doctor gave medicine and the patient recovered. Who got credit? If the patient recovered, the clergy; if they died, the doctors obviously were responsible. I do not know if I contribute to the amity of the professions if I point out the obvious fact that neither of us did any good.

V

Science has removed medicine from the bondage of belief just in proportion as it secures a basis of science and reaches the state of scientific demonstration. It would be going too far to say that when knowledge comes in, belief goes out because no one is more deeply dependent on belief and faith than the scientist but he hears the familiar warning "subject to change without notice." This is made obvious for as soon as a scientific fact is demonstrated faith is justified and belief moves in to permanent residence. Please note faith can come from experience as well as by revelation.

It is interesting to study the evolution of the individual doctor. In my early day some of the old doctors spoofed at the idea of diseases being caused by bacteria. They had no faith in the theory. They had never met one, the old doctor vehemently proclaimed; it was all so ridiculous. An old army surgeon angrily protested against the etiological effects of bacteria on suppuration by stating he had seen in his experience as an army surgeon many wounds filled with maggots healed the most rapidly. Did the maggots cause the wound? he triumphantly inquired. Smoke caused lockjaw, they

pointed out, because it was most common among people who lived in tents which were smoky, also, which they did not note, for floors they used the native soil, the home of the tetanus bacillus. I knew many of these old doctors. Faith was kind for their span of life ended while they were still firm in their belief, and really they boasted of their ignorance and were comforted, but they were wrong.

In contrasting my arguments between the teachings of the church and science I confine my discussion to the science of medicine only as a matter of expedience. I know medicine better than any other science. Besides the course of development of the science of medicine is more simply followed than other sciences and the ultimate results are most easily seen. It takes less intelligence to be a doctor than any other kind of scientist. The reason is of course a doctor gets along by using the results of real scientists, and if he falls short of knowledge he falls back on art, or silence; it takes practice to do this without leaving a trace.

Other sciences, I am quick to admit, have gone along to their ends without doing so many silly things as we doctors have done but their work involves a more exact technic. For instance, to be an astronomer one must know astronomy. It is not possible to bask under the reputation of a real one as many doctors do.

One cannot insist too strongly that science at its best is based on belief. For instance Newton's theory of gravitation has always been regarded as a model of scientific thought but after Compton and Einstein worked on it they found that the fringes needed fixing. We believed the theory of gravitation was a perfect job, but we find even that lacked something. Belief covered some defects in details. That is true of many scientific facts, they just don't stay facts. So it seems that when it comes to ultimate causes there are some things we accept in faith; even though we be-

lieve it to be science, we are never certain. This keeps scientists always in a jittery state. We cannot say complacently that it was revealed to us, because nothing ever has been, nothing but recurrent evidence of our own limitations which makes agnostics of us all; we come inevitably to a point where we must admit we do not know.

Why astronomers got to nosing around for trouble I cannot answer. With us doctors it is different. The nature of our problem forces us to seek advancement. The reason is we doctors must deal with facts. If our patient dies, at least so far as the mundane observation goes, he is dead. We doctors are paid off on the basis of these obvious achievements, there is nothing to hide behind. There is much talk about the common impression that doctors' bills are the last paid. Perhaps this should be so because so often the beneficial results achieved by the doctor eludes the lay mind. Happily they pay us on the basis of their faith in us; I say this in defense of the people. They pay for the results which they can see, also for the results hoped for. I mention these things to show how both professions skate on the thin ice of public credulity. Of course the clergy have the advantage of us here. No one expects to see any results. The doctor says the pneumonia patient will have his crisis next Saturday, and zowie he dies. The minister takes less risk in his prognostications.

The clergy have only to evolve theories which no one can disprove. So long as their public remain ignorant of truth, or indifferent to it, their theory is safe. This does not sound right. It implies that the clergy are accused of being dishonest, which usually is not true. A dollar may be counterfeit but if one believes it is a good dollar he is not morally responsible as a counterfeiter. The person who made the counterfeit coin is responsible. The responsible party is the one

who coined revelation out of the atmosphere of his imagination, not the man who retails it.

Nobody ever comes back from the Elysian shore to complain to ministers if their promises were not fulfilled. The clergy are secure against suits for malpractice. Thus it comes that the responsibility of the clergy is much greater to their members than is ours. They have no immediate extraneous check, as we have in death. We can conceive of a clergyman promising salvation to his patients during their lifetime. Only when the clergyman meets Peter can he learn what has become of his patient, whether he is in heaven or hell. Suppose that Peter tells him his friend is not here, to go seek his old friends and apologize to him for making false promises and collecting a fee therefore? But that is finding out rather late. For instance during my boyhood an evangelist came to town and preached to the multitude and many were converted. A sheriff in an adjoining state had a desire to hold converse with our evangelist but that worthy departed hastily for parts unknown just an hour ahead of the sheriff. Soon the converted persons turned again to their Peruna and Hostetler's Bitters. All save one man, a railway engine killed him. In my boyish mind I cogitated on the fate of that man. Did God recognize the labors of our evangelist? The one killed in the accident had proclaimed publicly that he believed and in so saying he fulfilled all ecclesiastic requirements. The faithful shed tears of joys at his funeral because he had accepted salvation. Things are so complicated. Likely he did not backslide because he had not had time to return to sin as did his more agile cronies.

Thus it comes about that the result of achievement or failure of the clergy must be read out of centuries of history and they must be their own critics, or it must come with the reaction of the general public to their handiwork. Thus it comes that the clergy now are

checked on more closely than formerly. Just now the question is what did the faith of the clergy do to prevent this war? Even as late as my childhood the preacher was sure he was right. He was called by God. Some still believe this.

Two thousand years look down on the clergy and ask for evidence of achievement. The clergy had centuries in which to find out that their theories got themselves and the people nowhere, leastwise in so far as bringing about the brotherhood of man is concerned. That is they should have had time to do so had they checked results according to the rules of science but failing to do so they have remained where they were in the beginning. At least if they got to where they started for, the people did not. The idea of the brotherhood of man is at the moment not generally accepted. Now people want to know how about showing us some results. Belief is no longer legal tender. The only belief that has been proved true is that it takes cannon to withstand cannon. That is a physical fact, belief and good intentions are out for the duration.

Is it the God of Moses or the God of nature to which we must look for protection in the future? Did the God of Moses contribute or hinder the great cause of the brotherhood of man; what did Paul do when he substituted his Christ for the Jesus in its mother's arms. Those are the ugly problems that must be answered. My minority report above noted related to the alleged goodness of God. So far as I could see there was something wrong. If we elect to trust to the goodness of God obviously we must recognize the emergency value of explosives as measures of temporary protection. The local representative in my boyhood so far as I could see had as his outstanding achievement a large appetite for spring chicken. As an agent to protect little boys from sin he was a total loss.

In order to understand how the wide chasm de-

veloped between the two professions the clergy now must inquire how their teachings have influenced the welfare of the human race during the period of their domination, just as we doctors do. Unhappily they still refuse to check on themselves. If a doctor asks a minister just how much good does he do he gets mad at the doctor. There is no occasion for anger, it is a fair question but that anger reveals the uncertainty of the very basis of religion.

Ask a doctor how about sulphur as a remedy for diphtheria, he doesn't get mad. He admits the situation was rather sad in years gone by but we had nothing better then. But look at us now, he counters; we found something that cured the patients and we promptly threw sulphur into the discard and laughed, or wept, at our former ignorance. Suppose for the sake of comparison we should have believed that revelation told us sulphur was good for diphtheria, that a good and just God said so. We would still be treating diphtheria with sulphur. When Klebs, Behring et al, announced they had found a cure for diphtheria we would have chased them into the creek.

Why the clergy have not found by now an ecclesiastic antitoxin for the universal cure of moral turpitude is perplexing. Sure enough they have done fairly well for themselves but not so much for human cussedness because that was not their concern, salvation for all was their task. What would happen if the world should suddenly demand a world free from hates and a world at peace in lieu of salvation and a promise of eternal life. Instead the ear of the populace now hears the noise of cannon so that the voice of the clergy has come to sound like an apologetic whisper from a mis-spent leadership. The sad part is they try to meet the difficulty by shouting louder, or more often.

We doctors pay for our liberty to change our position by the necessity of doing it. Our patients have

the last guess. If we fail from necessity we do the next fool thing that occurs to our minds, that is we evolve new hypotheses and start out anew. But the important point is the disaster is apparent to everybody. It does not rest on belief. Of course we may believe in what we believe but that does not excuse us if our belief turns out to be wrong. If we are wrong our problem dies on us. The clergy are not faced with such obvious reality, at least it is not obvious to them until war comes and their charges, like ours, die.

After we got hold of fundamental truths and recognized them, we were quick to substitute truths for beliefs for we found that believing that what we thought was the truth but was not, did not help us. Then we believe in a new newly acquired truth until it blows up on us. Thus it is plain while a doctor does not need to have much intelligence, he must have great agility. Our advancement is obviously a complicated process. Revelation of truth comes to us only as we toil with the laws of nature and wring from it truth bit by bit that is to say with us revelation comes only after truth is revealed and is proved by results.

VI

We have one great advantage. Our God of the universe is the same and unchangeable and rewards are given us only for toil. We have the advantage in that the laws are always the same, operate the same for each investigator. The diphtheria bacillus causes diphtheria now and forever. We are safe from the changing meddling of higher critics. Nobody asks did Klebs and Loeffler really live? The clergy on the other hand are subject to the whims of revelation, which does not tell all groups the same thing. It is like income tax collectors, one says "Do this," the next one comes along and says "That first man was crazy in the head, do thou thus and so."

The doings of early medicine will be made the chief consideration in this chapter since the course of religion will be detailed in succeeding chapters. It is, in view of subsequent developments of medicine, chiefly of historical interest. We all find amusement in considering the funny things we did in our professional childhood, no matter if we do not act any differently in our maturity.

It is a characteristic of the simple minds that they are eager to see what they are supposed to see. This tendency is equally useful to both professions, so we started with equal chances. This made the people susceptible to the acceptance of many superstitions such as black magic and witches irrespective of which profession dished them out. As noted before, we dressed alike, made the same kind of noise; the people could not tell the difference. The Indian medicine man shows us today how well it would work if we had not split up. The failure to see the difference is what holds the people so close to mythology. A trained mind can humbly say "I do not know" but a small mind must know for sure. We doctors have needed that in our practice in times past, just as much as did the clergy. Generally speaking the younger the doctor the more sure he is of his facts. He even knows the cause of cancer.

Even now we cannot follow hard and fast rules. If our patient is an intelligent person we frankly tell him that we do not know what is wrong with him but that we sure will try to find out; he has faith in our honesty and some hope in our ability to actually find out and is temporarily satisfied. So great is his faith that he is willing to come into the clinic for several days' observation so we can check and recheck. But the crux is we must produce results. If we tell him he has gall stones we must lay them on the table after operation, or we remove his goiter and his pop eyes and

nervousness disappear. Then he goes home and spreads the glad tidings and sends his friends to us.

On the other hand of course some patients refuse to accept anything short of finality in our diagnosis and not receiving it at the hands of one doctor they seek what they want elsewhere. Hence we hedge a little on occasion and the ignorant man is given a positive diagnosis, the best guess we can make on the evidence at hand and we keep on studying his condition hoping that in due time we can achieve what we presumed to deliver in the first place, an exact diagnosis. Of course we have in a measure lied when we told him positively that we knew what was wrong. He was too dumb to know the truth so that makes no difference because so were we. Naturally we did it for his own good. Obviously what is best for the patient is best for the doctor, ultimately. I mention this just to show how complicated the practice of medicine may be, some science, some psychology, and just a pinch of moral turpitude if we must, for the good of the patient of course. This is what the doctor means when he says he is going to do an exploratory operation.

The first great advance in studying diseases lay not in the discovery of something new but coming to realize that the old is useless. There the lack of revelation to guide us serves us well. That really is the hardest thing to do, to admit that he is flat broke and no place to go. It would be mean to say that what we found hard to do the clergy has found impossible; answer—nowhere to go.

This is the more remarkable because we had no one to tell us what to do, nor even tell us that we must do something. If, however, it had not been for nosey scientists we might still be using sulphur as a sovereign remedy in diphtheria. The public did not tell us doctors "Now you go out and find a real remedy for

diphtheria or we will chase you into the ocean." Neither did God nor his angels tell us in a loud voice how to go about finding a remedy. But the still small voice of the God of nature whispered to Pasteur, Koch, Klebs, Behring and their kind and they hunted around in their heads and found a few little cells labeled "curiosity, spiritual inspiration" or something like that, and they got busy. Whatever may be said they have achieved eternal life in so far as they will live as long as children are born with throats as culture ground for the dread bacilli. We have intruded on the domain of the clergy.

The study of mysticism and superstitions still requires attention because it still dominates the teachings of the church and even medicine has not wholly divested itself of them. Of course it is easy to see the splinter in the eye of the clergy and perhaps there are beams in our eyes. Believe me many thousands of doctors are busily engaged in personal ocular inspections to discover the presence of any foreign body in the eye of the science of medicine.

There is another elemental trait in the human mind which both professions use with equal effect. The distinctive factor in a primitive mind is that it cannot distinguish between cause and effect. If something was done and something followed, what followed naturally is due to what was done in the first place. Just to show that I was educated I will mention that the Latin for this is *post hoc, ergo propter hoc*. To the modernly educated youths let me point out, this does not refer to the hock shop. The corollary was equally true. If something was done to prevent something and the thing we did not want did not happen it was a score to the good. I myself as a child wore asafoetida in a bag around my neck to ward off diphtheria. I did not get diphtheria.

Facts that are not true can be used in a great variety of arguments. I am reminded of the ecclesiastical controversies just prior to our Civil War. The same source of information, the Bible, served them both, but it got the nation into war. If backfired on both; they must go down in history as the chief cause of our own private war. Obviously ministers should keep their mythology in extramundane efforts. It worked the same way in preventing this war. What will produce salvation will not produce peace. Nobody can deny that today. It is ominous that the soldier boys are now asking questions.

The superstitious therapeutic measures we doctors formerly used, now just around the corner, were on the same basis. A bisected black cat placed about a limb, that is an arm or a leg, the site of a snake-bite was a certain cure. In one case I knew of the patient died. The cause of the failure was ascribed to the belief that the cat was not entirely black. It was contended that there certainly were a few white hairs which had been overlooked. The conclusion was that the next time greater care would be used in excluding cats which might have a white hair. I have never seen more sincere people. It never occurred to them to doubt the efficacy of a black cat as a cure of snakebite.

That line of treatment was used by old doctors they told me when I was called to see a patient bitten by a snake. When I suggested that the whole procedure was silly, I got the gate.

Another ancient belief was that if a vigorous young person slept with one enfeebled from age or disease some strength would go from the strong to the weak. I have seen tragic results from this superstition. Healthy young women were caused to sleep with tuberculous patients. The result was soon neither was healthy. Reason, the supposedly healthy young person really

wasn't healthy enough, didn't withstand infection, and both died of tuberculosis. I have seen a number of such instances. This was before the contagiousness of tuberculosis was recognized. It seems incredible that such events could have transpired within the memory of one yet living. Of course these events occurred in the hinterland, geographically and intellectually speaking, but the people got the idea and it took a long time to divert them from it. Today when we find a case of tuberculosis we report it to the health authorities and they must see to it that no healthy person is allowed to sleep or even live with them. Please note I mean even today. We are still that close to superstition.

We find in this modern day a variation in the same mental process when adjustment of vertebrae is practiced; when this does not relieve the pain it is said there is some associated or inter-current disease. Or if saying there is no pain does not relieve, of course there is a lack of faith in the doctor. Prayer too fails and this is due to the supposition that the patients are not sufficiently deep in their faith. We prayed for peace and it is now obvious that we did not pray loud enough, or did not have faith, or our temporary enemies did not have faith in our bluff, or they had more faith in tanks. It is a very complicated problem. All we can say for sure is that there was a miscalculation, on our part. Belief in all these instances fails as a substitute for exact knowledge. Prayer to cure disease, adjusting joints when the maladjustment is between the ears, are funny to us doctors, but to many of the clergy the claims seem reasonable, because be it noted they are at their old stunts of trying to reason without facts.

When we doctors resort to mythology we use high sounding terms like "practical psychology." This of

course does not work when the patient is really sick or when actual results must be achieved. One thing is obvious. The thing that makes us doctors such undesirable problems for the clergy is the inherent pup instinct to investigate everything. Nothing has been written out for us and we naturally are skeptical of all written records.

Scarcely more than a century ago we all believed infectious diseases were due to atmospheric conditions, evidence—the various smells. The clergy thought disease was due to sin and they were right as the New Testament abundantly proclaims. But the pup instinct led us doctors to the discovery of bacteria. We doctors found out the bacteriological cause of sin. The Old Testament needs another book treating of the bacteriology of sin.

As will be more fully explained in a later chapter the problem of the etiology and prevention of sin should be turned over to us. The discovery of bacteria led to the formulation of the theory that infectious diseases were due to bacteria. First we saw the bacteria, later on we proved that they were actually the cause of the disease. That rested on evidence and the theory became a fact. Still later we compelled those same bacteria to produce substances which caused their own destruction when the patient was sick—those were the antitoxins. Later we made them produce substances that prevented their development—that was prophylaxis. Instead of consigning sinners to perdition, it would rival Paul if the clergy could cure sin by more sinning. With their use the patient would feel fine and would not want any remedy, and horror of horrors, they would not need a doctor, nor the clergy.

Moses is famous for his sanitary laws, plagiarized be it noted, but he was no bacteriologist. Even now that we know all about bacteria we had to evolve laws by sanitarians backed by governmental authority in order

to make the public accept what is for their own good. The public preferred to stick to the old theories of infectious diseases due to sin. Here we have one on the clergy. They tell us how to get rid of sin and achieve salvation but they do not tell us what sin is nor how to avoid it, only how to learn how. In fact the most complete text-book on sin in its grosser forms is the Old Testament. To the young having a desire to learn how it is done I refer to Proverbs Chap. vii. I would like to urge every boy and girl to read this chapter. To the one it explains the technic in greater detail than anywhere else recorded, to the other to show how to be forewarned. I would like to provoke ministers to read it, which evidently they have not done.

To us doctors it looks as if God made sin in order to make a remedy necessary and then waited for us doctors to find the remedy. We doctors did not create bacteria just for the fun of finding a remedy. The Old Testament makes of sin a fine art so that the clergy will have something to combat. Leastwise what would they preach about if there had been no sin to repent from. The clergy have a vague premonition that we doctors know a lot about the etiology and causation of sin and are doing all they can to prevent us from exhibiting our knowledge in practice. If anybody understands what I am talking about, I have said too much.

Funny thing, we doctors are as feverishly as ever seeking measures to still further limit the need of doctors. Whatever is the cause, we doctors look to the prevention of disease with unremitting fervor. Where is the doctor who would not give his life if he could find some measure to prevent the occurrence of cancer, just as cheerfully as Jesse Lazear gave his life to eliminate yellow fever? Countless doctors, unmourned and unsung, have given their lives to advance their science that would make the profession unnecessary. The sad

thing in the conquest of disease, most doctors fail, only the few succeed. There is where our reasoning falls down. We do not know, agnostic to the core, yet we advance on faith; someday we shall succeed and cancer will be no more.

In a way we are chumps. One wonders whether lawyers try to make laws which will eliminate the need for lawyers. It looks to us doctors as if laws are made so it will take all the lawyers in the country to figure out their meaning and then the judges agree on what they mean and then the Supreme Court makes their guess; sometimes it appears that their conclusions are made to suit the tendencies of the times and are subject to change. But after due deliberation it is apparent that the lawyers must do as they do because the clergy fall down on their job of eliminating sin. The things for the most part which the Old Testament prohibits are not matters for the court, while the things explained furnish a large part of legal practice.

Just suppose a doctor-minded person found himself a clergyman and got the idea he would change things so that there would be less need for clergymen. The whole problem is the elimination of sin. No sin, no need for ministers. The first problem is whether sin is really congenital or if it must be acquired. I believe that honest inquiry will reveal that it is not actually congenital. It is like tuberculosis. This disease is not hereditary in the sense that the baby is born with bacteria in its body but that there is a hereditary physical weakness which forms a good boarding place for bacteria as the child grows up. Therefore the job for the clergy should be to give attention the building up of resistance to sin a number of generations before the child is born. Let us assume that by a process of careful breeding and education one developed a couple which when presented with a child they surrounded

it with every care for intellectual and moral growth. Of course sin would not be mentioned. One can readily believe that such children might go until their wedding day before they had any need of a minister and even to invite him in then would be a complimentary jesture, a bow to tradition. As it is ministers do not try to prevent sin. They just raise a warning finger and say "Papa spank."

If I had the making of the courses in theological seminaries I would give special courses on prophylaxis of sin but it would of course not be so labeled. I would remove the word from their dictionary. It would consist chiefly of music, the beauties of nature, good books. Even then after they grew up and had to see sin they would not recognize it as a part of themselves and it would not seem interesting just as is the case for many today. I most assuredly would keep Proverbs Chap. vii, above mentioned, and Boccaccio carefully hidden away.

VII

The rapidity with which church colleges are disappearing is distressing. Some do not disappear but are taken over by municipalities. This process is technically known as face saving. This is a tendency which should cause the clergy serious concern. Faith and revelation fall short.

An outsider should be excused if he wonders if the trouble is to be found in the fact that in some the purpose is to educate for the glorification of the church, not to educate for life. Once the church establishes an educational institution to educate for the benefit of the student, somehow it loses its denominational complex and it becomes nonsectarian. That seems to be an ungracious thing to do. One president of a large university explained to me it was done because so long as the schools were sectarian the professors were shut

out from old age pensions which made it difficult to retain desirable teachers. No matter what denomination the professor must eat, or at least he thinks he must.

Here is something that is interesting. I have been studying catalogues of theological seminaries. One is impressed by the small number of pupils, some of them average two instructors per pupil. In contrast my alma mater had 1887 applications for 70 places in the freshman class in medicine. This relationship is not direct. It does not mean that the prospective theological student applies to the medical school instead. To be a good doctor one must have a congenital absence of the fear of truth. Sure now and then a doctor turns minister but these feel the urge because of the lack of patients.

The hospitals present a somewhat different situation, of which I can speak with confidence. The first hospital we have seen was established by Aesculapius, an imaginary character so the first hospital must have been an imaginary one and hence likely the patient too. This is interesting because it is evident that the conception of the need came before the realization. It was the product of an awakening conscience. This makes one wonder what inspires the building of a church hospital, whether it is to glorify the church or whether it is altruistic, for the disinterested service of mankind. There are all kinds, divisible in a general way into two groups. The one which serves the sick if they can pay, otherwise the sick go to public hospitals. The purpose of these hospitals it seems is to glorify the church and the patients serve only as attributes of the glory of the church. It all depends on the particular hospital. But there is the inevitable chapel to anticipate the spiritual needs and has as its chief exhibit a portrait of the Bishop. From a doctor's

point of view the finest exhibit of a true spirit is the night nurse carrying a bedpan. There without taint or reservation is life of self for the life of others.

The other type of church hospital serves all and are charitable, when they cannot collect. This is as it should be and most certainly is not written in derision. These have done, and do a most commendable work. The difference is: In the first group of hospitals the patient pays or moves, as above noted. In the second class they collect if possible but if not, the patient is not thrown out. That is to say, charity begins when business fails. The reason the church can do this is because their most capable help serve without compensation in a monetary way. To a doctor it looks as if the church is doing the real toil by proxy. A very desirable relationship between the hospital is not only self-sustaining but actually contributes to the church. That is real head-work on the part of those who run things. One party does the work, the other receives the emoluments, and the glory.

The other party to the charity set-up is the doctor. Charity patient, charity doctor. Hospital gets the first money, which is exactly as it should be, the doctor gets what is left, if any. This is in no wise a complaint, but an expression of appreciation for a chance to help the unfortunate. That is all the religion we have.

But the church insults the medical staff by giving them a set of rules which tells them what they cannot do. These are based wholly on ecclesiastical grounds, and from a scientific view-point are pitiably asinine in fact, or lack of facts. It seems incomprehensible that such should be so when the medical profession rivals the church in the regard of the public. This can have but one influence, and one end. Power sometimes blinds institutions to their obligations in religion as

well as in politics. As it is the church forces the breach between the clergy and the doctor. We doctors are all right to do the work for those who cannot pay, for the glory of the church, but ecclesiastically considered we are such an immoral group that they must surround us by prohibitions. Let no one get it into his head that I refer to any particular church. True only one part of their prohibitions is in the scrub room of hospitals but all denominations feel that they are responsible for the moral conduct of us doctors.

I say the domination of doctor by clergy can have but one end. Half the suffering people now endure could be relieved if doctors were allowed to do what they realize should be done. That is our religion and we are but biding our time when we shall be scientifically and morally free. Herein lies the real cause of the chasm between our two professions. It is we who are going into power.

The church was the first and to date the greatest political power. But politicians are more and more proving themselves apt pupils. As so often happens the pupil tries to supersede his teacher. They are muscleving in between the church and their greatest achievements, the schools and hospitals. This seems not to cause the church any concern. The church is self-perpetuating. They do not ask anything of their adherents, it tells them. Politicians on the contrary are more or less dependent on the individual voter and in order to show their importance they must appeal to the weaker element of society, the improvident individual. Politics will care for him when he is sick and will educate the children so that they may wear white collars of the haberdasher, to hide the iron collar of political bosses. Vote right and the politician will see you to the River Styx, from there on he has no jurisdiction. So between the two everybody is cared for

except the poor dupes who have within them the disturbing element of conscience.

The attitude of the church must change, they have prided themselves on the fact that they have remained free from politics and concentrated on keeping people out of hell. Now here is hell on your doorstep, yes, say it, crying like hell, to be saved from it. It is politics. That singular pronoun connotes nobody in particular. It is an impersonal pronoun. With all their splendid organization, vast membership, and there is the rub, they could control the politicians if they were not divided. All that is needed is the elimination of interdenominational hate, and an inspiration to really work for an end that is tangible, elimination of the politician and his pet occupation, raising hell.

One would think the doings of politicians would frighten the church. Through the machinations of the politician hospitals are following the schools into the field of nonsectarian control. The world today is controlled by dictators through politics. They have now become coequal with the dignitaries of the church in power. We doctors are frightened because our science is now commandeered by the politician as well as being limited by the church and it is inevitable that hospital doctors will be appointees of ward politicians. With that our religion of serving the sick falls, which means that the altruistic spirit of the doctor will die.

We scientists are just a harmless bunch, with the curiosity of a child, and the clergy should recognize it. We know nothing about hell, except to put salve on it when it breaks out. Forget we once made you mad. Nobody said anything about upsetting God, did not then, nor since. In fact we have our own God who is more satisfactory to us than the God of Moses. Our God of the universe made laws for us to try to find out about. Just like giving children puzzles at Christmas—

time for them to work out. Science is never iconoclastic. It seeks only to build. It is impartial, contains no malice, seeks only the truth. The clergy have benefited as much as any other class by the labors of the scientists. Now it is time they contribute to the good of all mankind. Even so we doctors would rather be under control of the church than of the politician. Their opposition shrinks to a whisper as compared with the brazen voice of the politician.

The church seems to think that what the clergy do is no business of us doctors. Who pays the price? The clergy have run the world for a couple of millenniums and the end is a mess. Who pays the price? The doctors do. More doctors are in the Service than any other group of professional men. There are more doctors' babies crying for the return of their papas than of any other group. Prayers did not keep the peace, now the doctors must go with the boys to save the pieces as much as possible. It makes us mad. Most men with families receive a deferred rating. Not so doctors. Age only counts, no matter how and to what degree they have dependents. More than a third of my profession are already under call. It is things like this obviously unjust disregard of doctors' families that make us mad at the clergy for lying down on the job of guiding the world.

Spiritual values never have been higher than they are in the world today but the church is becoming less and less the repository of it. When the clergy pray for peace and war comes, all they have to offer is more prayer and that is an insult to the reason of any mature mind. Following the teachings of mythology has brought us to the brink of ruin, how close no one can calculate. It is unpleasant to realize that we have been saved by a nation without a church. Russia crushed, our turn would have been next.

Once together in ignorance, divided by ignorance, kept apart by ignorance, we better get together now, pool our efforts, or we will be united in hell and we will take our civilization with us. Only united work can prevent it and we cannot be truly united until the clergy realizes that truth only can prevent disaster. The fundamental thing is that everyone must be taught that anyone who does his best for mankind is inspired, and inspired to the degree that he sees the silliness of adherence to the bombastic pronouncements of a semisavage age.

We doctors can offer our own efforts to show how trying works. If everyone can create within himself the inspiration to do his best for mankind we will in time be rewarded by a civilized world at peace. We must forget all the teachings that are not true. The truth is we know neither what life is, less what death is, nor what comes next. Considering how small our pebble is, one should see that he can trust the unknown to the knowledge of the Incomprehensible Power which has created us.

CHAPTER X

HISTORY OF THE CHURCH

Of all things it would seem that are of no concern to us doctors is the history of the church. But this is not so because we suffer much more from the doings of the church than the ministers do. There is no doubt that the rule of the church causes more suffering than does organic disease. What comfort it may bring comes less often to the doctor's ears.

I need to present my interpretation of the life of the church for the development of my theme. I want to find out if I can how it came about that we doctors became subservient to the church, why it is that the church still dominates us directly and through our patients; that is they think they do. What it is churchmen feed on that has made them think they are so powerful and why they want to retain that power is the business of the doctor. Why the church has remained stationary while the world has developed tremendously, intellectually and morally, is what makes the history of the church the business of all scientists. If we doctors told all we know about the drift of the times it would astonish the clergy. I have not the remotest intention of bringing out the sordid history the church has written but it is necessary to the development of my thesis to summarize the things that bear on the disaster of this day and age. I intend only to hold up the mirror to those who understand what I may see while the innocent will see only the reflection of their own faith or ignorance. Beyond this I shall not go. I want of all things to avoid the stirring up of animosity.

Because of the divergent point of view it seems possible that the presentation of the viewpoint of a scientist, as above suggested, may be of importance even to churchmen themselves. Leastwise countless ecclesias-

tics have written histories of the church apparently without succeeding in pleasing anyone perhaps, certainly not everyone. Obviously these histories are written by proponents imbued with the idea of placing their cause in the most favorable light, from their point of view. The result is something like the history of the Democratic party, plain hereditary, Jeffersonian, Tammany, Southern, New Deal, and even perhaps a Maine species. That is all very confusing to a congenital Republican. Divided, yet the churches control us all. Despite this control we are confronted by global disaster.

I

I have read many variations of ecclesiastical history in general and of the Mother Church in particular. It sounds to an outsider as if one party had something to cover, something that would not bear the light of day, while the other side is as vigorously trying to throw not only the light of day on it but to add to the alleged shortcomings all that an acrimonious imagination could devise. This is obviously unjust because if the records are examined there is little difference between the two. One is reminded of a large dog regarding with contempt the barking of a lot of little dogs. Contempt and hate is the product, size of dog immaterial.

I have found the Catholic Encyclopedia the most reliable source of information as it is certainly the most scholarly. Contemporary history is often the most enlightening and I have dug deeply into tomes centuries old. Contemporary writers of history thought what was done in their day was all right but they horrify us today. They present records quite illuminating to writers of a more enlightened age. For this reason these have been my chief source material. Just an instance. An English king, in order to maintain

harmony among his subjects, had two boys beheaded because they asked questions regarding religious liberty. These boys had as grandpa, one William Kiffin. This person was a Baptist minister whom the King desired to have serve him as a city magistrate, just to show that he was liberal. Mr. Kiffin asked to be excused. He was peeved because of the treatment his grandsons had received. The King was surprised when the position was refused for such a trifling reason. Even in that distant day grandpas had funny ideas. I have his viewpoint because I have a few grandsons of my own and I believe I should be peeved if someone should behead a few of them.

In order to get a proper view of any period one must understand the history of the times preceding the event. For instance no one can understand our own Civil War who has not acquainted himself with the history of the nation, political and religious, for the fifty years preceding it.

I shall present my interpretation of the history of the church as much as possible of the church as a whole, based largely on the history of events when they were contemporary. The sects are of no great interest to scientists though of such vast importance to churchmen. They are chiefly devoted to the gilding of events of the past. They cannot be allowed to cover the basic events because they are with us, even though covered by advancing civilization. St. Augustine wrote in 380 A.D. that there were so many sects it made him dizzy. The sects were within his own church. If he should come to life again he would drop dead from apoplexy when he sees how many there are today. Even in that day he died a defeated and broken-hearted man. He made the mistake of taking the sects seriously and of thinking it was possible that one could do anything about it. Anyone with a sense of humor should read

the history of cats, almost revered in Egypt, execrated in Rome. That was a thousand years and more before the grand row started.

Therefore it is not so strange for an old doctor who has lived the last half of his life outside the church, yet in sympathy with it, because of intimate contact with members of the various cults, to write the impressions he has gained by observing the influence of the church on the patients he serves. The sentiment which imbues kind persons to attempt to cast oil on the troubled waters of domestic and neighborhood rows reflects his character and also his stupidity in attempting the impossible. It would be of advantage to us doctors if churchmen would agree on the best way of reaching the Elysian shore. How much of it is church and how much politics is a very confusing question.

An old doctor has one qualification for writing history, in so far as observing things as they seem to him without emotion, proceeding automatically according to the laws of scientific thinking. Even though in the nature of things it is a foregone conclusion that he must fail to convince either party it does not excuse him from doing the best he can. Life is like that. Toil which leads but to disapproval of those about him leads to condemnation. This reward is ever the end of the earnest workman.

In making this study I come to a conclusion that gives me new hope. The church members are nobler than the clergy that supervise or dominate them and it is equally true that individual clergymen are nobler than the creeds to which they must subscribe. Even the clergy sense this situation because they write books about the evolution of religion or the church. Obviously it is not the church which is advancing but the people. Therefore I have the hope that the last

chapter of the history of the church has not yet been written, but it will not be written by the clergy but by civilization which is advancing. We doctors may yet be able to sit in a ringside seat and learn the verdict.

Excluding for the moment the question of politics I must confess at the outset that it is not clear to me what it is I am attempting to discuss, religion or the church but it must be the church because one side gets mad at the other. I have been vainly trying to reserve the use of the term "religion" for something above hate, something each individual may strive for according to his own concepts of right and wrong. This is not always possible because the term is used whenever something needs a coat of whitewash. This is clear because every earnest worker has a religion, even though he may have no church. A man's church may fail him, as mine did, but his religion may continue to reach greater heights, if he can keep his mind on a worthy cause and keep in touch with the noblest of his race. In that he is following the dictates of his conscience.

Be this as it may, in reading histories of the church one comes to the conclusion that we are still dealing with mysticism as the basis, the mysticism of semi-savages. We can say this because they acted that way and still do. We see many astonishing parallels in the history of the American Indians in the past century. That they started as such, no one can deny. To admit this should not be objectionable to churchmen. That is the reason there can be no evolution of the church. There can be no evolution so long as the revelations of the Old Testament are made the basis of their creed; and when it ceases to revelate, everything stops there. Therefore, the God of Moses is a fixed point. To abandon this would compel a complete readjustment. A church based on the conscience of man for instance,

or the God of science, would grow with the development of mankind. As I shall show later on while Moses furnished the basis, the real evolution has taken place in congresses of clergymen. It is the product of the human mind, so that the God of the church today is as much a man-made product as is the God of science. They should stick to their God they have builded. But the time has come, not suspected by them during their constructive days, that the God of Science has smoked them out of their mythological complacency, yet they hold on.

It is when churchmen seek to strengthen their position by the achievements of science that they but make themselves ridiculous. Churchmen would be better off if they said frankly "I believe" and stand firmly on revelation because they have not gone beyond revelation. This is not a reflection on them for when the scientist has gone the limit he reaches the same conclusion. He is a scientist, but he learns his limits and having gone his limit, he sits calmly down and says from then on he only feels. He does not say he believes because when he runs out of evidence he stops. The limit he realizes is the limit caused from a lack of greater intelligence, not that there is not a higher goal beckoning him. He always has the consolation of feeling that maybe he has made a few bricks which some greater mind can use for building something greater. The fact is the development of science is just such a continuous building process. The churchman's highest goal is defending the revelations of the God of Moses. The scientist has nothing to defend except his own handiwork.

This fact is revealed in the life of one of the greatest scientists of all time, Pasteur. A friend once put to him this question, himself a devout Catholic: "Please explain to me how you, who so laboriously pursue and analyze facts and so studiously refuse to certify

them except on adequate proof, explain to me how you can unquestionably accept the entire ritual, creed and dogma of the church?" Pasteur replied briefly, "Because my science is one part of me, and my faith is a distinct and separate part. I have the faith of a simple Bretagne peasant, and my regret is that I have not the deeper faith of a Bretagne peasant's wife." He felt assurance of eternal life. His science he build-ed to a point where his work will live forever.

The point is Pasteur did not allow his church affiliations to influence his work which made him as a scientist one of the greatest benefactors of mankind. Whatever question may arise, there is no doubt that he, by his labors, achieved immortality in the benefit he brought to his fellowmen. It would seem, therefore, that he achieved and earned eternal life through his labors, but he only felt that the salvation for his soul was assured. He achieved his tranquil feeling by working to the limit and as long as strength endured. I have his motto above my desk: 'Obligation to do good ceases only when power fails.'

Pasteur proved the impossibility of spontaneous generation which was a direct negation of the validity of revelation, the basis of the teachings of the church. That indicates the dual personality many scientists achieve, the feeling that death does not end all even though there is no evidence of life beyond the grave.

True, Pasteur belonged to a particular church, but it was in a deeper sense his religion in his work which furnished the mainspring of his life, the service of mankind. This is not an isolated instance as is made obvious by the fact that other great scientists have had a like religion quite independent of any church. I knew one of these well: Virchow, one who has done much for science and through it a great benefit to all mankind. His intense devotion to the religion of his science dominated him throughout his life even

to a tottering old age. He had no church, his vision was the truth, and his labors brought him immortality. Every person who has a tumor and is cured by operation shows the results of the labors of this scientist. His influence will live on as long as there is a human race for tumors to grow on.

Since the institution the history of which we wish to examine is universally known by the hybrid term Christian church one can do no better than to follow as nearly as possible the popular concept of what it is we are trying to analyze. But to trace the genesis of the Christian church is difficult. It began as a Jewish product, admittedly so in the case of the Old Testament, and so we start with a cruel and jealous God. The Christian idea, it is alleged, is based on the Jesus concept. With Matthew 1:1 the vulgarity and cruelty disappear. The reason for this no one has explained. It was not racial because the personnel remained Jewish still. It will not be sacrilegious I trust if one wonders if we would not be better off if the God of Moses had been abandoned, after science had proved the basis on which his teachings rest, to be untenable, and gone out completely for the Jesus concept as developed in the human conscience before St. Paul took hold.

II

In order to write a history of anything it is necessary to find out as nearly as possible what it is. In approaching this problem it is natural to turn to the dictionary. To determine what is meant by the word *church* is quite impossible. To say that it is a body of believers in Christ obviously will not do. A body professing the same creed and acknowledging the same ecclesiastic authority will do for a start. There seems to be no definition which will include all faiths and sects, including things political. One might say that a church is a political institution organized for power

whose chief purpose is to perpetuate that power and whose teachings have been decided in conventions assembled. As a reward for fidelity to the church, all churches, they hold out promise of immortality of the soul.

Since the term "religion" is sometimes used as synonymous with the church we must take a look at that word. Religion— (Latin, a *taboo*), a restraint; verb *religo*, to bind; 1) "The service of adoration of God or a god expressed in forms of worship, in obedience to divine command, especially as found in accepted sacred writings, or as declared by recognized teachers and in pursuit of a way of life regarded as incumbent on true believers, as ministers of true religion." This part of the definition hitches it onto church and belief; 2) "One of the systems of faith and worship;" 3) "The profession or practice of religious beliefs;" 4) "A pursuit of our noblest concepts." This allows us to accept the dictates of our conscience, and escapes the bonds of ecclesiastic domination. This is the religion of the scientist.

We gain more light if we turn to some of our most renowned writers on religion. Carroll A. Wise has given a definition which even an old doctor can accept: "Religion represents man's struggle with the facts of existence in an endeavor to find the underlying relationships that give them meaning and to create a way of life based on his resulting insight into the nature and meaning of life." This is a hand-made definition as revelation has come to one who has observed mankind and has sought to formulate the basis for a general betterment. He got it out of his conscience.

We find Taylor proposes as a minimum definition: "Belief in spiritual things." Obviously he really means religion in its best sense, free from both church and

politics. Scientists can subscribe heartily to that definition. Spiritual things to a scientist are those things he knows exist but which are beyond his grasp. Frazer's definition says the same thing: "A propitiation or concentration of powers superior to man which are believed to direct and control the course of nature and of human life." This is based on the assumption of the right to use one's ability to do things on his own initiative, that something is needed to stimulate the powers which fate has given us. This assumption would only bring trouble to church members.

I have attempted to magnify this phase in my chapter on conscience. It is the only thing that has brought advancement to the human race. Fate has given us the power to express out of ourselves a higher state. What that power is nobody knows. Something, some power is put in us, or else we could get nothing out of ourselves. What that power is has not yet been revealed to any one.

We come now to the real basis of the power of the church. It is belief. *Belief*—here one is confronted with the definition of religion bringing in "belief in a God demanding our worship, a recognition and a subservience to a person or persons to whom we owe admiration, adoration. Belief is a confidence or trust; conviction of the truth or reality of a thing, based on grounds insufficient to afford positive knowledge but which is believed on accepted opinion; a tenet or a creed." From this definition it is impossible to make out what is church and what is belief; but that is no worry, the church will tell him what he is to believe. Really obviously he only obeys, just as a small boy believes he better get up when he hears his father step on the stairs.

The Britannica says religions are of two types, the *Primitive* and the *Higher*.

The *primitive* is pure mysticism, studied in a previous chapter, a consciousness of something working within themselves of which they do not have the intelligence even to realize that they are subject to the workings of a power beyond them. This makes it evident that scientists are riding in the same boat, just one jump ahead of them. He has a word for it, albeit a word for which he has no definition. This is evident when we are told that the feeling that there is some power beyond us is so universal a phenomenon that it may be said to belong to human nature (Father de Smet). Mysticism carries with it something beyond our ken and is higher than the teaching of the church. This idea is confirmed by Mr. Riley when he says that he found everywhere among savages a definite tradition concerning supernatural beings, of whom one is the generator, the creator of all things, and interesting too, a parallel source of evil.

Higher religions on the contrary, are based on revelation. That is only an assumption. Both are still mythology. It is higher only in the sense that it is better organized. The higher religion of revelation therefore puts us in a pocket where we stay until we get more of the same.

All churches still are based on what was original revelation. The only way to add to these revelations, it seems, is to get busy and do some revealing for ourselves. The worst of it is we do not know whence these revelations came. All we know is what the Mosaic crew said. Their statements have been proved untenable, but they are still used, and defended as true, even though everybody knows they are not. Why this is so is the most important problem before us today.

Clarke does not help much when he classifies religion into Tribal, Ethnic and Catholic.

Tribal is easily enough understood. That is the

dumb state of primitive races who just feel there is something higher and is synonymous with the primitive form above noted, including the scientists outside of the laboratory.

Ethnic religion is racial. The Egyptians had a maxim that man ought to worship according to the religion of his nation, for religion was occult, not a belief. Occult means that they saw nothing, it just came into their heads. To quote Clarke further: "... the Jewish religion had confidence that the world must at last worship Jehovah, and that all the Gentiles would come to believe in him. Hence it is a missionary religion, compassing sea and land to make proselytes." Therefore, ethnic religions developed gradually within a tribe or race and cannot be used on this basis for a dogma of a single church but not to include a church usable for all nations because of the different ways of thinking. Obviously the scientist cannot have an ethnic religion because he is concerned with the entire celestial sphere.

The *catholic* religions (I do not refer to the Roman church) develop as a sort of crisis proceeding from some "inspired" soul, that is, his religion is something that has been revealed within himself. Therefore, the type of religion produced depends on the character of that inspired soul. A number of such inspired souls together form the basis for a church, but it is man-made. Therefore we get all tangled up. We start with Yahweh and find ourselves adding up the roles of a number of inspired persons. Sure, those possessed of that inspiration may be striving for nobler ideas, but here one is still in a pocket.

The word *inspired* is a very uncertain one. I shall meet the painful necessity later on when it was doubtful if such a person was inspired or if he was wrong in his head. When I was a child all the ministers

were called of God and they dilated loudly on circumstances to prove their cases. One of these I recall explained that one day he was plowing corn and sat down to rest. He looked up and saw in the clouds two letters: "P. C." This he interpreted as a call to Preach Christ. My father commented that it might have meant *plow corn*, and he should have said "giddap" to his team instead of unhitching. Most saints seem to have started with events capable of several interpretations, like Paul. As I shall explain more fully later on in those days when in doubt, they made him into a saint. Nowadays when in doubt, they send him to a hospital. Therein we see the evolution of revelation, when doctors go to work on it.

The New Deal for instance was an inspiration—the kind it was, time has revealed. One may be inspired to believe he is right and yet be wrong, and act to the injury of all those who fall under the power of the delusion. That is revelation to date but just what it is revealing confuses even those responsible for the revelations.

III

Much as I dislike to do so it seems impossible to avoid the use of the word *religions* so deeply is its use imbedded in the world literature. Therefore, when we inquire as to the validity of a claim to a religion we are confronted with the fact that there have been seven or ten, or even thirteen, major religions. The form of the catholic religions broadly speaking only need concern us here. They include not only Moses and Christ, but also Zoroaster, Buddha and Mohammed and many others. It is at once apparent that these great religions do not necessarily depend on the person placed at the head of any particular church.

We may begin this by studying the Brahmins.

Their chief idea is that spirit is the only reality. Their deity is made to say, "I am the great Brahma, eternal, pure, free, one, constant, happy, existing without end. The wise man annihilates all the things of sense and to him they do not exist." The joy of the Hindoo was in the worship of the spirit. Chunder Sen said: "Remember your creed, one God, one Scripture, and one family of prophets. Love the one true God, and worship him every day. By daily worship make your lives holy. Attain communion with the saints of heaven inwardly in your minds. Eat their flesh, and drink their blood, and turn your bodies into vessels of holiness. In your lives show the reconciliation of perfect wisdom, perfect asceticism, perfect love, perfect devotion, perfect conscience, perfect joy, and perfect holiness. Be not satisfied with the fraction of any one virtue. Do not covet the prosperity and pleasure of this world. Preserve your lives with the food that comes from mendicancy. Be happy in others' happiness, and sorrow in others' sorrow. Regard all mankind as one family. Hate not, nor regard as aliens, men of other castes and other religions. Be ascetics, but live in the world in the midst of other men, and let them live in you. And let both them and yourselves live con-jointly in God. There is salvation in unity, and peace in unity." This is a very large order and sounds like material out of which one could make a usable religion. To achieve such a religion it would seem to be simpler to start all over again than to try to reform the one we have.

The religion of the Egyptians saw wonders in all about them. Animal worship merely meant to them the embodiment of God's thoughts. They accepted along with God all the various manifestations. They were not worshipping any false gods. Their stress on the hereafter is to be seen in their care and skill in

embalming. They beheld life and beauty in everything. It seems as if they just felt immortality without figuring out any belief. In this they were in accord with most modern scientists.

Zoroaster was the center of a noble religion. He made the distinction between right and wrong. The gods are on one side, demons on the other. Yet they had the idea of combat, the good contends against the evil but the only weapon recognized was the free power of a righteous soul. They recognized the power of character. Though suffused in Iranian mythology Zoroaster is of particular interest because of certain parallelism of subsequent events. He was a historical character born about 600 B.C. He underwent a religious preparation between his 15th and 30th years when he received a revelation and came forward as an exponent of superstitious beliefs and heresies. Seven visions of heaven were revealed to him by archangels during the following 10 years. Then as a final test he underwent a temptation from the evil spirit but came out triumphant.

Zoroaster taught a modified dualism, a constant conflict between good and evil. The essence of his teachings is expressed in good thoughts, good deeds, good words, in the preservation of the purity of body and soul. This was to be achieved through religious observances and ceremonial rites. This sounds like a religion.

The importance of agricultural pursuits as a religious duty is particularly emphasized. We worship at the same shrine with our Victory gardens. The care of useful animals, particularly cows and dogs was advocated. This was carried to the extent that they disposed of their dead by exposing them to be devoured by dogs. This may have given rise to the expression "Gone to the dogs" in use today. It is of interest to

note that Zoroaster died a violent death—nature not stated.

We find in Buddhism a very interesting variation of Zoroasterism. Buddha did not take himself very seriously. He thought he was a purely human person. He thought that the most important things were the attainment of full self control and the suppression of evil thoughts. He thought the belief in gods was futile and taught that the belief in souls should be abandoned. To prove that he was human he died of simple indigestion about 500 B.C. He had his own private religion, and stomach.

Despite the fact that Buddha wanted to be human, and devoted his life to strict morality and a steady process of mental culture, after his death his followers concocted the theory that he was sired by a star, which made him a sort of deity. In spite of his better judgment, he became the center of a religion.

It is interesting to speculate what would have been the result if the nation had continued to live according to the moral philosophy of Buddha untainted by civilization. At least, that was a new note in the history of mankind and it is worthy of study. Viewing the history of the nation as a whole one wonders what would be the result if they could trade their clergy for a good public health system like ours. One can say, based on statistics, that the infant mortality would be reduced seventy-five per cent. What that nation needs is not our variety of salvation but our sanitary engineers to clean out, say the holy shrine of Benares where the faithful bathe in the holy waters of the river at one end and throw those who die into a different but adjacent part of the same river. No religion can purify a pool in which decaying bodies are thrown and make of it a sanitary bathing resort. The curse of that nation is its religion. It does not

permit the light of intelligence. There is a perpetual dark age, but it does not resort to mass murder, as in war, but only lets the babies die. In view of these facts Tagore's book is worthy of study. He reaches great heights in his own mind but he is blind to the needs of children. In his own mind he is of greater importance than the millions of children who perish, but his importance is only to himself. He should remember that among the countless children who die there might be many incipient Tagores.

When one sees all these religions, there was a desire from the beginning to be decent. Nothing very high sounding, not much progress. One cannot help but wonder if we would have been better off if we had inherited one of these instead of the Mosaic "revelation." It seems incomprehensible that in all these twenty centuries we have not advanced to a religion of service, of love and gentleness typified by the mother and her nursing babe, where the mainspring of civilization lies.

IV

We turn to church historians for help. What is religion and what is church is very confusing. To quote Dr. Clarke, "Did the Apostle Paul regard the gentile religions as wholly false? On the contrary, he tells the Athenians that they are already worshipping the true God, though ignorantly—'Whom ye ignorantly worship, Him declare I unto you.'" When he said this he was standing face to face with all that was most imposing in the religion of Greece. He saw the city filled with idols, with idols of majestic forms, the perfection of artistic grace and beauty. Was his spirit then moved only with indignation against this worship, and had he no sympathy with the spiritual needs which art expressed? It does not seem so. He says "I see you are, in all ways, ex-

ceedingly pious." He did not profess that he came to revolutionize their religion, but to reform it.

Dr. Clarke continues "The Jewish Christian tried to repeat in Christianity their old mistake which had prevented Judaism from becoming universal. They wished to insist that no one should become a Christian unless he became a Jew at the same time. If they had succeeded in this, they would have effectually kept the Gospel of Christ from becoming a catholic religion. But the Apostle Paul was raised up for the emergency, and he prevented this suicidal course. Consequently Christianity passed at once into Europe, and became the religion of Greeks and Romans as well as Jews. Paul struck off from it its Jewish shell, told them that as Christians they had nothing to do with the Jewish law, or with Jewish Passovers, Sabbaths, or ceremonies. As Christians they were to know Christ, and they were not to know him according to the flesh, that is not as a Jew."

Most startling of all, to quote Clarke, "Man outgrows all supernatural religion as he becomes more fully unfolded intellectually; then science, art, literature, humanity take the place of God as the object of devotion and service." Sure, that suits us scientists fine, but you can't build a church out of such material; even though the church includes these things, it has always looked askance at too much unfolding of the intellect.

All of us have retained enough of our early church training so that Clarke's statement of the lessening of faith with increased intelligence gives a stab of pain. However if we look about us this statement seems justified. Religion is most enthusiastically accepted by primitive races and among those whose intellectual horizon is limited, but is religion in the

sense that they feel dependence on some influence above them. They believe what they are told.

On the other hand among the clergymen most firm in their faith have been intellectual giants. But it is faith in the unknown and unknowable and like the lower intellects they regard it with veneration also outside the pale of any sect or denomination. These men may be members of a creed and find expression through it but that is only incidental. Even they see past the church to the God of the universe who controls the laws which they study even though they get mad when a scientist asks who said what.

It is unpleasant to say so but it is the mysticism of the church as now preached and practiced that keeps the most intellectual men away. That a person may fail to gain spiritual stimulus listening to the achievements of Moses and his friends seems understandable. To wax facetious it must be obvious that it is difficult to keep the average man's mind on Jonah and his fish when there are many of them in the creek calling him. Those who have some understanding of the workings of the laws of nature may receive a greater spiritual stimulus watching a bobbing cork than from the inspired personages of the Old Testament.

As a corollary one of the most religious orders I have known was not a church at all but a lodge because it was made up of that kind of men. Many of the most religious persons I have known belonged to neither lodge nor church. In fact I venture the opinion that if all male persons of adult age outside of church organizations could be collected together they would be dominant as factors in general community influence and would outnumber the members of churches. That is to say in other words religion is an individual concern, a church is a collection of

individuals who have agreed to subscribe to certain rules and regulations.

V

Our real concern is to classify ourselves. As noted above we must conclude we got our God from the people who moved their mythology in on us. No malice aforethought we must conclude, they just liked the atmosphere. Nevertheless in the Moses or the Mosaic atmosphere, they created for us a jealous and vengeful God. In using the word jealous by the great lawgiver in his Commandments perhaps he said more than he intended. Jealousy is sadistic to the core as anyone can see by attending any divorce court. There also one sees the handmaiden, hate. Murder is only a more courageous sidelight. We must like it still for that is what we get preached to us. Yet the jealous God the great lawgiver gave us just does not fit in with the present taste. So we are told that God is a loving, just, merciful God. Purely an apology, for there is not a single word to warrant it. We do wish Moses had made us a more decent God. This wish is altogether to our credit and shows that we have advanced much morally. It seems a hopeless task to rebuild a semi-savage religion to make it meet the needs of today. Henry Ford was smarter. He built the Model-T which served a generation, but one can tell the difference when one drives a Lincoln. Ford did it—he is inspired.

Why the picture changed abruptly at the end of the Old Testament has never been explained. To say, as one would like to do, that it was the advent of the concept of Jesus in the New Testament is confusing because when we search for the truth we find that our Jesus is only one of the sixteen crucified. From this one might conclude that the birth of Jesus was not an event in history but a general tendency

in human history. That it really evolved within the conscience of man as we see it in the history of the Egyptians. We surely would clear the ecclesiastic atmosphere if we could wipe all else from human history and grasp the idea that the Jesus concept is to be found in the baby in its mother's lap.

Only of one thing are we sure, the Jesus concept endured from that time on. The new note we got was Jesus or the Jesus concept, whichever it is. But we do not have a Jesus church, not by a long ways. We got side-tracked or kidnapped, or something. When politics took hold the church had the decency to preserve inviolate the name Jesus and called the church Christian.

How Paul could take a man repudiated by his own people, change his name and his character completely and sell it to another race is the most incomprehensible event in history. Must we conclude that in it is the hand of destiny? Can the old order change or must a new hand take over the job? Certainly the first task will be to evaluate Paul's church exactly for what it is, no matter how it hurts, or whom it hurts, to do so. The do-nothing policy of Paul has proved a delusion. The time has come when we must study the blueprints of the future. The road we have followed ends at the edge of a precipice, and we are looking over its edge and Paul's free salvation teaching does not furnish a desirable lighting place at the bottom of it. All we can see is that it is filled with the bodies of mothers' sons. A recent writer commenting on the placid serene inactivity of the clergy in the interwar period called it treason to society.

The life and writings of Paul is an awful mess as I related in a previous chapter, and the study of it leaves us enmeshed in mysticism.

VI

We must now turn to the records to see just how the church started, and grew. By such a study we may hope to find out how it came about that the grand row among the churches still continues.

The most noteworthy assemblies took place in 325 and 381 A.D. It was decided in ecumenical council assembled on what was to be presented for people to believe. That was the real beginning of the influence of the church, no doubt of it. I quote from the Catholic Encyclopedia, vol. xi, p. 39: "We believe in one God, the Father Almighty, maker of heaven and earth, and of all things visible and invisible. And in one Lord Jesus Christ, the only begotten Son of God, and born of the Father before all ages. God of God, light of light, True God of True God. Begotten, not made, consubstantial to the Father, by whom all things were made. Who for us men and for our salvation came down from heaven. And was incarnate of the Holy Ghost and of the Virgin Mary and was made man; was crucified also for us under Pontius Pilate, suffered and was buried; and the third day he rose again according to the Scriptures. And ascended into heaven, sitteth at the right hand of the Father, and shall come again with glory to judge the living and the dead, of whose Kingdom there shall be no end. And I believe in the Holy Ghost, the Lord and Giver of life, who proceedeth from the Father and the Son, who together with the Father and the Son is to be adored and glorified, who spake by the prophets. And one holy, catholic and apostolic Church. We confess one baptism for the remission of sins. And we look for the resurrection of the dead and the life of the world to come. Amen." They were a hardy bunch; aspirin had not yet been invented.

Many years ago when I first read the results of that council I experienced a sense of relief. The tears I had shed because the Father had turned on the pleadings of the Son were needless. Though it came slowly it knocked out of me respect for the teachings of the church leaving me only the Jesus concept as developed in the mother and child away back in the Egyptian home. I have since been an Egyptian.

The creed above quoted was a fine basis for political purposes. Everyone knew exactly what he believed. Just what influence this had on subsequent events is impossible to say. We do know it did not prevent the development of the Dark Ages. Both the mother and child and even salvation in spirit were forgotten.

The subsequent councils, abstracted from the Encyclopedia above noted, are of interest. They are as follows:

(3) In 431, declared Mary mother of the Son of God and condemned Pelagius.

(4) In 451, decided there are two natures in Christ. Excommunicated Eutyches.

(5) In 553, condemned Origen.

(6) In 680, defined the two wills of Christ, Divine and human.

(7) In 787, regulated the veneration of holy images.

(8) In 869, condemned to flames the Acts of Photius' irregular council.

(9) In 1123, abolished the right, claimed by lay princes, of investiture with ring and crosier to ecclesiastical benefices and dealt with church discipline and the recovery of the Holy Land from the infidels.

(10) In 1139, excommunicated Arnold of Rescia.

(11) In 1179, condemned the Albigenses and Waldenses.

(12) In 1215, more against the Albigenses, and published 70 reformatory decrees.

(13) In 1245, excommunicated and deposed Emperor Frederick II, and sent a new crusade to the Holy Land.

(14) In 1274, brought a temporary reunion of the Greek Church with Rome. Laid down the rules for papal elections.

(15) In 1311-13, dealt with crimes and errors imputed to the Knight's Templars, and with reformation of the clergy and the teaching of Oriental languages in the universities.

(16) In 1414-1418, put an end to the scisms in the Church, temporarily.

(17) In 1431, object—the religious pacification of Bohemia.

(18) In 1512-1517, planned a new crusade against the Turks; this came to naught because of the upheaval in Germany due to Luther.

(19) In 1545-1563, met to examine and condemn the errors of Luther.

(20) In 1869, decreed the infallibility of the pope when speaking ex cathedra. This council was still in session in 1908.

These Councils are of interest because the chief purpose seems to have been to take a crack at somebody. All this added up to the sum of hate, even before the 19th Council, when Luther furnished the target. He should have been ignored. Just imagine the American Medical Association calling a meeting to condemn the chiropractors. We have seen many irregular practices rise and fall. Scientific medicine continued to build to newer heights and the irregulars flew off like the mud from a rapidly revolving wheel. Luther was the Homeopath of that day. He pointed out some things which needed fixing but it would have been the part of wisdom to have done the fixing from inside. When the Homeopaths came

along with their little sugar pills the regular profession sought to make their medicines more palatable. This was a gain because nobody's medicine did any good. If delusions must be swallowed it is pleasant to have them made of sugar.

How little the Reformation reformed is obvious. It was the unspeakable Calvin who was the worst of the lot. I shall have more to say of him in a later chapter.

Without an attempt to be historically detailed we note that out of the Reformation developed the Huguenots, the basis of the blackest event in history, two million dead, nothing decided. This period is worthy of study because at no other time have church and politics been so inextricably mixed. No one knew which was what from day to day. The worst of these centered about the Edict of Nantes; Henry IV of France in 1508 granted to the French Protestants full liberty of conscience and other privileges, and Louis XIV revoked the Edict in 1685. To follow the intricacies of the mess is as difficult as to analyze the contents of a garbage can. It smells, even today.

It would seem that even the Jews took in too much territory. In their 13 creeds as recorded by William Hurd, Article VII states:

"I believe, with a firm and perfect faith, the doctrine and prophecy of Moses is true: he is the father and head of all the doctors that lived before or since or shall live after him." Later on Article XIII was added: "I believe, with a firm and perfect faith, the resurrection of the dead shall happen when God shall see fit. Blessed and glorified eternally be the name of the Creator." The words "shall see fit" leaves one in doubt if that event has occurred to date. I hope I shall not cause offense if I ask the facetious question: Are there any Jews in Heaven now? I do so only to em-

phasize the fact I have repeatedly noted. Nobody knows anything about a future state; he can only feel.

That in the ancient days religions could be started on all sorts of mental quirks is easily understood. But now comes Frost with a new one classed as sacred. It has to do with a nice little girl aged 12 who had a fever of which she cured herself. Fevers in children usually cure themselves about the fourth day. This same little lady fell on the ice and a doctor said she had a conversion, what of is not stated, but as a spinal dislocation was suspected there is but one guess. On the third day she read Matt. ix: 2 and was cured. Every doctor has had his slumbers disturbed by such cases but they did not appear to him as sacred. This instance could be followed further which would lead one back to the fundamentals of religion but they are not sacred.

To show that each church has its difficulties I note the beginnings of a prominent Protestant denomination. Just how noble concepts may suffer from its friends, I quote from Hurd, p. 609: "Who is a Methodist according to your own account? I answer: A Methodist is one who has the love of God shed abroad in his heart, by the Holy Ghost given unto him: one who loves the Lord his God with all his heart, and with all his soul, and with all his mind, and with all his strength. God is the joy of his heart, and the desire of his soul; which is constantly crying out, 'Whom have I in heaven but thee, and there is none upon earth that I desire beside thee! My God and my all! thou art the strength of my heart, and my portion forever!'" Though many of the words are difficult to interpret it is on the whole noble, considering the times.

"We (Methodists) believe indeed that all scripture is given by inspiration of God; and herein we are dis-

tinguished from Jews, Turks, and Infidels. We believe the written word of God to be the only and sufficient rule, both of Christian faith and practice: and herein we are fundamentally distinguished from those of the Romish church." Fighting words, those.

Now comes John Wesley who says (Hurd, p. 612): "I believe justification by faith alone; for I am firmly persuaded that every man of the offspring of Adam is very far gone from original righteousness, and is, of his own nature, inclined to evil. That this corruption of our nature in every person born into the world deserves God's wrath and damnation. Therefore, if ever we receive the remission of our sins, and are accounted righteous before God, it must be only for the merits of Christ, by faith, and not for our own works or deservings of any kind."

"Sanctification, the last and highest state of perfection in this life. For then are the faithful born again in the full and perfect sense. Then have they the indwelling of the spirit. Then there is given to them a new and clean heart, and the struggle between the old and new man is over."

"Suppose ye that I came to send peace upon earth? I tell you nay: but rather division. For from henceforth there shall be five divided in one house, three against two, and two against three. The father shall be divided against the son, and the son against the father; the mother against the daughter, and the daughter against the mother; the mother-in-law against the daughter-in-law, and the daughter-in-law against the mother-in-law. Luke 12:51-53. And the foes of a man shall be they of his own household. Matt. 10:36."

"And, first I grant, it is my earnest desire to drive all the world into what you probably call madness: I mean inward religion, to make them just as mad as Paul was when he was so accounted by Festus. I

grant, secondly, it is my endeavour to drive all I can into what you may term another species of madness, which is usually preparatory to this, and which I term repentance or conviction."

"I grant, thirdly, that extraordinary circumstances have attended this conviction in some instances. A particular account of these I have frequently given. While the word of God was preached, some persons have dropped down as dead; some have been, as it were in strong convulsions; some roared aloud, though not with an articulate voice; and other spoke the anguish of their souls." A hysterical orgy, with all that implies. Nothing points more emphatically to the phallic origin of the basis of the church. I saw it all as a boy, its meaning I learned as a young doctor.

This reminds me that once in lecturing I made an audience mad by reminding them that when Mr. Wesley was holding meetings in Georgia he fell in love with a Southern lady and told her if she would not marry him he would die. She did not and he did not. Having made the acquaintance of some Southern ladies close enough to get refused is a compliment. I present it as my judgment that was the most sensible thing he ever did.

It is much more creditable than his vehement declaration "If there are no witches there is no God." Three quarters of a million women witches executed! To deliberately develop mass hysteria and claim it to be the act of God was an original idea.

The mischief of this teaching did harm which extends down to today: the teaching of individual helplessness, that there is nothing one can do when the world has proved that the noblest acts of man as individuals have been worked out of their own conscience. Salvation by lip service is the crowning example of moral cowardice. I hasten to say there has

never yet been exhibited a finer example of how a people can rise above the teaching of their church. Hysteria is definitely out now but the name of the originator of it is still defended.

Just to show my impartiality I will note that Buckle states that the clergy in Scotland were the meanest in history and he mentions cases. It seems that their chief delight consisted in making it tough for the ladies. Possibly the Scotchmen did not know what caused babies. Turley has this to say: "Perhaps the most pernicious of all the teachings of the early Church, because of its effect at the time and its persistence since, primarily affected women. The emphasis given to the story of Adam's temptation and the doctrine of original sin made the position of woman in medieval Christendom almost indescribable. She was to blame for all the sins of man, and hence for all diseases. The most holy and sacred God ordained human activity, conception; and childbirth, regarded with reverence and awe even by savage peoples, was, in so-called civilized Christendom, considered a sin which even contaminated the newborn baby. Woman was denied the assistance of physicians. As late as 1521 Vithes, a physician of Hamburg, was burned at the stake for delivering a woman. Women were forced to rely for help on butcherous midwives, barbers, and sow gelders, part of whose duty was not to make childbirth easier but to see to it that woman should suffer." As late as 1902 when twilight sleep was introduced to lessen the pains of labor there was the same old squawk, Genesis 2: 16: "In sorrow shalt thou bring forth children" still rules.

I mention these things to emphasize the fact that all denominations have advanced far above the creeds of their churches. It reveals that they have ignored

revelation in their way of life. It would seem but a short step to cease listening to revelation.

I have selected these denominations as examples because they are currently the dominating ones. I have quoted verbatim. They may present some things not generally known. We hear much of the evolution of religion. People advance but the church remains the same. The old hate is the same. I want to show how intensely they have been dominated by individuals.

One cannot suppress astonishment when some students of the history of religion find in the overinsistence on piety on the part of the clergy an element of degeneracy, as above noted, by killing the spirit which gave it birth and making ceremonies, of which they are the center, the essential factor. It would seem that to accuse the clergy of excessive piety is base slander, unless piety consists in hiding the egg shells.

VII

We are left in doubt as to whether there was one Moses, five or none at all. That is left to the higher critics to decide. These remarks may seem irrelevant and immaterial but really they are germane to the proper understanding of the church because the old Mosaic technic is still used. The church heads still do the planning but they hide behind the screen of the God of Moses when they get into a mess, like preventing war by prayer.

Of course the church dignitaries have their troubles. There is always someone tilting the skirt so that the slip shows. We refer to the higher critics. It would seem the chief function of higher criticism is to muddy the waters for us who are unlettered. To find facts we must resort to the records of the conventions which make the truth to suit the exigencies of the situation as I have done. The higher critics expose the fallacy of certain concrete things, like the swallowing of the

large fish, but the fundamental premises are allowed to remain unchallenged. Anything that the passing years has shown to be ridiculous is now either poetry or allegorical. When we doctors do fool things we hunt for something better. There has been no attempt to build only on truth.

The present agitation of the theologians reminds me of an old Kansan, whose eyes had seen only prairies, when taking his first view of the Grand Canyon exclaimed "Gosh, who dug that?" It seems many ministers today are asking the same question about the genesis of the ecclesiastic pit.

That the clergy are active in inquiring into the efficiency of our current religious education and socialization is made obvious by the following. In a prominent church publication a correspondent deplors the character of the sermons being preached today over the radio. I quote: "*Religious Radio of Poor Quality*. A comprehensive study of religious broadcasts in the city of Chicago was made last year by Everett C. Parker of Chicago Theological Seminary under the direction of Prof. Fred Eastman. The study, as published by the seminary, is a careful digest of religious programs released over 16 Chicago stations. Station WMBI, which is owned by the Moody Bible Institute, is on the air from 6:00 A.M. to 4:30 P.M. every day. All other stations offer only 46 hours of religious broadcasts per week, the smaller stations giving a large share of this time. Of the 77 religious programs, 14 are interdenominational, 41 are Protestant, 11 are Roman Catholic, 1 is Jewish, 2 are Christian Science and 7 have no denominational affiliation. Only three of the Protestant programs make any use of accredited religious scholarship. Most of the programs are what in medical circles would be known of as 'quack'." A recent book by John L. Fortson dilates on the same

theme in his "How to Make Friends for Your Church."

Representatives of some cults are determined to fight it out on the same old basis. It always has worked, it must work now. Others are honestly trying to find a way out of it by the simple procedure of trying to find their location by looking at the stars.

The general unrest is made obvious by many of the current books. A distinguished minister, Horton, in his "Can the Church Save Civilization" cites Keller in his book "Five Minutes to Twelve" addressing primarily the churches of England and North America: "Christian churches have but a short time to set their house in order, if they are to escape the fate which has overtaken the churches of Russia and Germany and impends over the whole of Europe: the triumph of an enthusiastic, intolerant and consciously anti-Christian paganism." Horton observes "I believe that Protestantism as a whole faces the necessity of undergoing the same process of judgment and purging which has previously been the lot of the Roman Catholic Church, the Eastern Orthodox Church, and the Jewish Temple." He says further "The Roman Catholic church, too, must surely expect judgment to fall upon her quickly in some parts of her vast domains. Already she has passed through two great periods of judgment and purging, at the time of the reformation and at the time of the French Revolution; but another period is upon her. In Spain and Mexico, the hands of the clock have come around again, to twelve, and past twelve; while throughout Latin America, there lacks but a minute of the decisive hour." That blast certainly should contribute to ecclesiastical amity.

That it may have some basis of truth is indicated by a general concern felt by the Mother Church. This is indicated by the recent book quoted above by one of the giant intellects of the day, Archbishop Spell-

man. Never to my knowledge has a defenseless cause been so ably defended. The book is dedicated to the "Sweet Land of Liberty."

This distinguished prelate says: "The reason the world is at war is that the rulers of the people and the people themselves have spurned or have forgotten God and God's Commandments." Yet he recognizes that "We must put our own house in order." Then he goes on to present a broad picture of us today, lamenting the pornographic literature presented for the corruption of minds and morals, quite overlooking the Day of Circumcision as presented in the Catechism, page 40. He blames science, knowledge and communism. Yet it was science that taught the Church the "orderliness of the navigation of the stars," which they do not—they are fixed. This intelligence is what we know by the name of God. Here we come together, it is the God science has revealed, the God of science. Yet he would rely on prayer and faith to lick the Axis when it has been proved that only armament, and more of it, can accomplish the job. "Lord, give us victory" is a noble cry but it did not work. We know it did not work. All the prayers for peace did not bring peace. Prayers for the war to end are answered only to the degree that we sacrifice armament and soldiers boys. The cry "Lord, give us victory" sounds like "Lord, I know my son is innocent," the cry of a mother as she sees her son go to the electric chair.

The Archbishop's God has led him to such a disappointment; why does he not do as I did, build himself a God in the service of his people. Up to date it has been fine for me.

Why should the Archbishop be so distressed at harvesting the fruit of his own planting. Children are educated to obey. Morals are built only by seeing the wrong and developing character to combat it. His religion built of sex and hate at a time of stress falls

into its component parts. To call his jealous and vengeful God good is futile in war or in peace.

We must look elsewhere for guidance. There have been many ministers who were above the bonds of Moses. But their voices were too few to impress the creed makers. It is significant that Fosdick's recent "On Being a Real Person" heads the best seller list indicating that the public is seeing past the old creeds and is seeking a new light.

Louis Wallis' "The Bible is Human" makes it easy for the unlettered to follow the genesis of the Bible from the preCanaanite savages down to the latest Sunday school last Sunday. Who believe today that the old authors of the Bible were inspired? Those vulgar old coots could not register an invitation to dinner at our homes today. The writers of the Old Testament are not only wholly human but were of small intelligence and lower morals.

Will it be necessary for the Supreme Court of public opinion to sit in judgment on the church or can the church purge itself? Time will tell. Heretofore the juries of the Councils were packed and everybody knew exactly what the verdict would be before they started. The purpose of these meetings was to express hate. This same thing holds true for all religious conferences. They all merge into politics.

In contrast to the opinion of eminent ecclesiastics I quote the viewpoint of Millikan, one of our most distinguished scientists. He offers a blueprint of a plan for reconstruction. In speaking of ways in which the church can be made to perform its function he suggests the following: 1) by destroying organized religion as Russia did and building on its ruins some other organization to carry on the work the church should be doing now; 2) or assist religion *as it now exists* to eliminate its faults.

Here is a nasty truth: in the greatest steel center

in the world there is not one single church, yet it is the products of this churchless town that have stopped the Madman from invading their country further, and ours. Like it or not it was following the laws of physics that saved them and us. But for them we would be making our pious supplications from bomb-proof shelters.

It may appear that I have lost sight of the primary reason for writing this chapter. A distinguished newspaper editor remarked recently that with so many of our doctors serving in the armed forces the medical profession is appreciated as never before. He expressed his judgment that if the nation could have only either doctors or churchmen they would vote for the doctors. So perhaps churchmen better take a look at medicine. In war or in peace medicine has a totally different background from the church. Nothing is revealed to them, they must find out facts by working to find fundamental laws. Their knowledge is offered to all. Medicine knows only brothers. Wounded soldiers are given the best the doctors have, no matter what the creed or what side they represent, if any. The doctors are in the front lines. The clergy in the rear of both sides, representing the God of Moses, praying that the guts of the adversary be ripped out, while the doctor at the front is patiently putting them back and sewing up the hole while the God of science looks over his shoulder and gently whispers "That is the proper spirit, Old Boy. You and I working together will expose the mysticism of Old Moses some day."

Medical schools have courses standardized with the sole purpose of producing young graduates best grounded to relieve the suffering of their patients and to add new facts to the sum total of the knowledge of today. There is only one road to the science of medicine, the truth as we know it, always ready to be advanced. Just now the nation cries out for doc-

tors and yet more doctors, because in this dire hour of need they possess what is obviously needed; the common fellowship of man in spirit and in deed.

Our soldier boys are confronted with reality. They may be thinking how it came about that they are where they are. Why did prayers not preserve peace, only their efforts can end the war. Why they were hurriedly educated for death is apparent: to remedy the misdeeds of their elders in depending on an unhearing God. They want to get back home and have a wife and babies, to take up again the life for which they educated themselves. Suppose that facing the truth now, they may want to follow the truth when they return. There will be something for both church and politicians to explain. The shell of the chrysalis, formed by the dogma of the church, is about to be perforated by the adult mind of onrushing civilization. The emerging truth will have as its emblem, half wasp, half mosquito, stingers at both ends. Only by drastic methods can civilization of this nation be saved. The verdict is very apt to be written by our soldier boys; intelligent when they left, learning much now. They are fighting without hate, they and our doctors beside them. They will return with disillusioned minds. They are fighting nobly for liberty they are told and they may demand liberty from the platitudes of faith, and freedom from propaganda.

When this war is ended all mankind must take stock as to who saved us. Will it be realized that complacent reliance on the God of Moses got us into the mess and that we are being saved from it because our boys were equipped with implements to save us through the agency of the God of science.

To have achieved what is now needed was possible because the efforts of the scientists and the medical profession are united; all mankind is brother to them.

The best way to appreciate the contrast between our professions is to read histories. Histories of medicine differ chiefly only in details. No hate, just a simple record of progress. Fool things are abandoned as soon as they are recognized as such.

Perhaps I can best end this chapter by confessing that for centuries we fool doctors blew powdered sulphur into the throats of children afflicted with diphtheria; and then sat back helplessly and watched them die. But the weeping parents stirred our souls, stirred and stirred until we had antitoxin. Nothing was revealed to us except that our remedy was useless. We were inspired to find a remedy and discovered antitoxin. What inspired us? It just hurts a doctor to sit helplessly by and see a baby die.

Many years ago in doing a nonresident course I was assigned the task of collecting the insects of Kansas. I collected 200 and was quite proud of my achievement. While undergoing an oral examination before an entire faculty the chief of the bug department started with the startling question, "What is an insect?" I had learned no formal definition and every attempt to improvise one met with failure. When asked to make my own from what I had seen I replied "It is something that crawls, flies or hops, which you stick a pin through and fasten on a cork." I got a laugh and a pass because I limited my definition to what I knew. What is a church? I shall reserve my definition until the boys come home and have a talk with their parents.

CHAPTER XI

THE DARK AGES OF THE HUMAN RACE UP TO DATE

I have carefully considered the wording of the title for this chapter. I mean to study the people of that period, called the Dark Ages, extending from the revelations of or to Moses down to date. To call the period Medieval as scholars would have us do is not correct for the Dark Ages began long before that period and are still with us. The Medieval period we are told is supposed to comprise the period which saw the development of Christianity. It has not happened yet, it has remained as it was in the beginning. Civilization has advanced, arts, letters and science, but Christianity is that of Paul. Mass murder we thought must be made legal by a vote of Congress yet here we are in the midst of it—by edict. Congress a doormat, we elected them and are responsible for our act. Christian religion, democracy, representative government, all hopes of the future.

The dark ages to me is that period during which people killed each other. As we have seen this had the sanction of the Jehovah of Moses when applied to other tribes. Why neighboring tribes were exterminated in that day seems to have been for the purpose of securing cooks and writing poetry about the delights of their culinary achievements.

The reason the age is still dark is because we still adhere to the God of Moses, a cruel, bloody God. Civilization has advanced to a degree when it makes it necessary for the clergy to whitewash their God to meet the needs of today. Calling the jimson weed a lily does not remove the smell. The kind and loving God still drips a lurid pink as one can see by the morning papers. The blood that drips is that of our high school boys who just yesteryear were

laughing and larking as they viewed the rising sun. Were there ever any darker ages?

We cannot hope to eliminate the dark ages until we develop the moral courage to inquire who made them dark, and keeps them so. In the countless centuries before Moses there were no dark ages. Philo Mills tries to make those ages conform with what we want to believe now.

Really the dark ages began when the pagans killed the Christians because they were multiplying so rapidly that they feared for their power. When it was mixed with the Christians killing each other, then the dark ages were the affair of the Church. Moeller and Flick contain all the information needed to give a picture of what went wrong. Even the worst of our criminals today do not sink so low.

The church still educates for ignorance and the days are growing darker. We have grown in intelligence, vastly in accumulated knowledge, yet we are in the most senseless destructive war in history. It is the purpose of this chapter to study the reason for mass murder in the past which continues to the present day.

I

As above noted usually the Dark Ages are regarded by scholars as synonymous with the doings of the Church during a certain period. This is justifiable only in so far as the Church was the central figure in that period, not necessarily the cause of it. In the previous chapter I tried to separate the church from politics. It can't be done. The Protestants are wont to associate the Roman Catholic church, as we know it today, with the Dark Ages. It is a "holier than thou" attitude not warranted by the facts when studied without prejudice. More powerful, unquestionably, the Mother Church is, because more medieval. Somehow

the Church maintained a solid front because of a superb organization. To accomplish this end some very harsh measures were necessary which must receive attention.

Protestants met the problem in a different way. At first they were as rough as the mother church. Later on if a man had a brainstorm he just made himself a new sect. There was no attempt to compel any person or sect to stay in line with any set plan because there was no plan. This reduced the hates to a mild feeling of sorrow or contempt. The seceding one sorry for those who were misled by a misinterpretation of scripture. The result was a dissipation of influence so that the sum total became nil, except a faint squeak based on the salvation by faith.

On the other hand the Mother Church has remained a powerful organization but it is for the church. True enough when other churches became the state church, notably in Lutheranism and Calvinism they exterminated the heretics just as joyfully as did the Mother Church. They had the idea all right but they lacked the ability to build up a political system. They had rump conventions resulting in fissures which destroyed power. Even the Mother Church is operative only in certain countries and in those countries which she has controlled, as Spain and Mexico, it was for the church. The common people must be rescued by influences outside of the church. History shows clearly enough that when the church dominates, the ages stay uniformly dark as they were in the beginning. One cannot escape the conclusion that we must look elsewhere for the leadership the world needs. Something is fundamentally wrong; blood still flows. Modern writers show a commendable desire to forget the sordid medieval history. To this one can fully concur but we cannot

ignore it entirely. We need to hang such garments on the line we need to view in order to determine why the dark ages are still with us. It would seem that once the dark ages were recognized as undesirable that a new age would have been inaugurated.

One great difficulty in determining why they were continued is we lack reliable data on which to base a judgment. One might have expected a new light with the Reformation but a careful study of the Luther time and after fails to convince one that the lily was the common vegetable in their garden. The clergy stretch out their necks so that they can inhale a purer atmosphere but their feet still rest on the sordid foundation. It has always seemed to me silly that the Mother Church should have become agitated at the reformers. All that would have been needed would have been to publish the facts. What Luther nailed on the door was just what he called it. I would like to be able to say that hate between the churches as we know it today was born there. It would explain why this age is still so dark. Sad to say as noted elsewhere all the conventions the Church held were to condemn something, not one was held to build up something. To follow this would put me in the ecclesiastic doghouse because it suggests that the church is so constituted that just naturally it is looking for a row, that the dark ages are inherent in it.

Speaking of history one must seek the truth in trends rather than in books. One must study trends expressed in terms of centuries. As noted in a previous chapter to write the doings of the churches the writers are writing campaign literature designed to set forth the virtues of the candidates. One political writer excused himself by saying that the opposing party would present the shortcomings of the can-

didates. We find much the same thing when we try to read up on the dark ages. Just to mention two difficulties. Compare the church history of Darras and Lecky and the history of the Popes by Ranke and Pastor.

Let us give credit where credit is due. The early Christians suffered persecution at the hands of those who tried to suppress them as above noted. They learned the technic of cruelty so when it came their turn to suppress they knew just how to do it. Yet after all the whole proceeding needs debunking. If one studies the pictures of the cruelties they appear positively ridiculous. Take for instance a martyr with all four extremities cut off with a cleaver. He has a benign look on his face as befits a martyr. If one extremity were cut off the patient would be in collapse in two seconds and dead in ten. The purpose is evidently to show that being a martyr is fine if you die for a noble cause.

A careful examination will show that the Church did much during that period to rescue the best there was in civilization. Of course sometimes the church seemed submerged in the general cussedness of the period but even at its worst there appeared here and there evidence of a struggle for a better day. A study in the sympathetic way of these things convinces me that back of it all was something noble. The darkest chapter must be written not about the ancient church but about the internecine strife between the churches as we know them today, a struggle to the death, seething with hate. One church hates the other more than it does the devil, or war. Therein is easily seen the cause of the continuance of the dark ages. That they do it is obvious; why they do it still a mystery.

As noted above the Dark Ages of the Medieval period of history bring to mind the Church only be-

cause it was supposed to be the dominating power of that period, as sometimes it was but the real cause of the Dark Ages was hidden underneath. The Church is quick to claim credit for the good accomplished but is quite silent about the cruelties. So it would be desirable to distinguish between a Christian church and a cruel church but it cannot be done. It seems as though the Church was more nearly Christian after the fall of Rome than before or later. With the Church as with individuals it is tragedy that brings out nobility of character, opulence which destroys it. The churches today are the more culpable because their differences are so asinine. There are no outside sinister influences working against them. Therefore the age is dark today not because of the lack of light but because those interested keep their eyes so tightly closed because they fear they will see the light if they open them. Suppose some great event or power frightened all of them so that they all involuntarily opened their eyes simultaneously. That is the way we get hysterics and malingerers out of their perverse spells.

The Church in the Dark Ages did eliminate a good many scientists but there are no hard feelings. Scientists were eliminated because they got ahead of the procession. The old Church got rough with scientists because they feared they were going to upset the church's playhouse. Scientists did upset it but they still refuse to recognize it. No one now believes the world is flat, in an astronomic sense, but we still hang to Moses as though he told all about the celestial sphere. Even so the elimination of scientists is as nothing compared to the number of churchmen eliminated by each other. The growling one hears in a dog fight is not an expression of anger but of joy in the fight. It is the dog's way of swearing and pro-

fanity is only ecclesiastic terms disarranged and mixed with a lot of enthusiasm.

But fundamentally the church was not to blame. Christians were treated cruelly by pagan rulers, playful things like feeding them to lions. Of course the emperors fed some of the early Christians to the lions. A condemned man on the way to the gallows was comforted by his spiritual adviser by recalling how the early Christian martyrs suffered. "Yes," he replied "but they enjoyed it." This explains in a way what happened when everybody became Christian and began working on each other because of doctrinal differences—they enjoyed it. This is the hereditary mental aberration that continues today. A political candidate is willing to sacrifice his future opulence in order to serve the public.

If one wants to view a pocket edition of the Dark Ages, brought on spontaneously by ecclesiastical edict, he can find it in Africa during the time of Saint Augustine. There one finds all the elements of hate and pure cussedness. How indifferent those Africans were to the fate of the Mother Church is shown by a little incident. One of the dignitaries had a pet rooster which he called Rome. One morning a flunky rushed in and exclaimed "Rome is no more." This dignitary was much agitated until he was told it was the city and not his rooster which was no more. A rooster was of greater concern to him than the fate of the Mother Church. His religious convictions must not have been so profound.

For the real cause of the Dark Ages one must study the Old Testament. We were unfortunate in inheriting the worst of the available religions as was noted in the previous chapter. To adhere to it still when stripped of all poetic phrases our religion is a revelation of or to semi-savages. Why did God talk

to Moses like a semi-savage. Nothing could be more obvious than that it was Moses doing the talking. He was a semi-savage and could talk no other language.

Those in command of that period were concerned with two things, sex and of course poetry. Sex incited murder but apparently without hate. It seemed to be just the order of the day. It was revealed to them that it was the chief end in life. Therefore the sex phase did not present itself for what we see on the station platform today. That they thought it was all right is made evident by the fact that they wrote poetry and even burst into song. The possibility of sex a sin had not yet been discovered, in fact it was not a sin but an inherited privilege. We see today that when the kill urge is rampant sex takes charge of human emotions. Who can suppress a laugh when he thinks of Solomon. Seven hundred wives, 300 concubines, two children. Even here one may jump to wrong conclusions because Solomon may have been a paranoic and his entire retinue have existed only in his imagination. This viewpoint is warranted because as we saw in a previous chapter he did some tall prevaricating when he built his temple. Perhaps there is another explanation. I am only stating a well known fact when I say that nowadays we hear such talk only in institutions for the mentally obfuscated. I know one man who tells visitors that he is feeding a million steers. One trained nurse does all the feeding.

Our interest in this chapter is in tracing the responsibility of the church in keeping things dark. Conformity to the dictates of the church was mandatory, to think was dangerous, hence knowledge was frozen in its tracks. The church is, I mean all churches, are responsible for those things because they still carry it along. No church today is interested in light be-

cause it would illuminate the basic factors on which they are builded and conducted. There seems no way of escaping the Mosaic inheritance. The church still feels that to loosen its hold would be to lose all, that once they admit the revelations were wrong they are sunk. The only hope is that the church will see the truth, as revealed by the development of the growing intelligence of man, is a safer guide than the old teachings. Why must we still hear about those vulgar old coots when we are surrounded by countless thousands of thoroughly decent men, ranging from track laborers to our great scientists? That is the responsibility of the church today.

We come now to the real cause of our trouble. To maintain the validity of revelation dissenters must be suppressed. In order to accomplish this a strong organization was and is necessary. Politics as developed by the church is recognized as the most perfect political organization yet developed. It is as it is an organization which refuses to permit the light to shine because it would threaten the organization. It follows therefore the darkness can be and must be modified by the effort of the sum total of individuals, be they in a church or not, a member of a political party or not. No organization is ever reformed from the top.

To find the good in an organization it is necessary to search among those who serve. This makes it impossible to tell a coherent story of the services the church rendered during the so-called dark ages of history. Too often one cannot tell whether he should affix a plus or a minus sign. One must remember the kind of people of that age. I hasten to say the church did things of interest to doctors. It rescued many things pertaining to medicine. This was done at least in part by monks. This organization we must credit to the Church, at least they were excrescences

of the domination or damnation of the Church, as much appreciated by the Church as is a wart on the nose of a society dame, only an annoyance but firmly attached. It seems that they shine brightest when away from the direct light. Nonetheless the history of the monks in America presents the noblest we have in the history of mankind. They sacrificed everything for what they believed was a noble cause. They showed a faith in something beyond, quite equal to that of a scientist trying to find out the secrets of the universe. They were an ascetic group it is true who usually individually, sometimes in groups, went away back in the hinterland to think it over. They were as secure from the influence of the Church as the science researcher is from the liberal arts faculty. During a part of the Dark Ages they kept alive the spirit of Jesus. They could do this because their isolated state kept them from quarreling with their coreligionists. Noble sentiments are but an annoyance in any kind of politics.

It is quite possible that the advantage they gained was to find within themselves the something inherent which enables people to gain a higher concept of their relationship to mankind, just by quietly thinking it over.

These explanations are in order because the life of Jesus had the elements of asceticism in it. Some seek a parallel with the modern type. The simple life, renunciation, a life devoted to truth is a life of vanities abhorred, ambitions foresworn. That is not asceticism. One finds here the mental picture of the scientist in the laboratory. Silence, listening, accepting as divine the great unfathomable universe. That leads to nobler thoughts than proclaiming adoration of the God of Moses. The lone scientist is brother to the ascetic in that sense.

There is one matter that is generally overlooked by Protestants. In that day the Church was all of us, creeds and sects; the spirit of that day is what spawned all of us. Only by remembering this obvious fact can we understand why the "reformed" parties still acted very much like those from which they were reformed. If we could remember that the blood of the Dark Ages still flows in our veins we could see in ourselves the things we have no desire to see. There is nothing fundamentally different today, all claim the same God. Creeds are the reflection of differences due to quarrels that never existed. One thing is certain; every defender of the revelation of Moses has the clay of the dark ages on his feet.

II

With this preliminary observation we may go back to the years 500 to 800 A.D. and find a situation which we cannot comprehend. The Emperor sat on the throne in Constantinople. The small kinglets of the various empires paid homage to him. The bishops of Rome were pushed around at will. They held office if Constantinople wished. If the Greek functionary did not like the Romish popes they were told what they could do, or where they could go. That was politics and it was inevitable that this high-handed manner would bring a reaction.

What happened contains too much detail for even the historians to untangle but it leads to Charlemagne, whom we all met in high school. He was a large party we are told and did not like doctors. The cause of this was his doctors wanted him to eat his meat cooked. But those were personal matters between patient and the profession. The doctors were foolish. No smart doctor advises a large person to eat other than what he wishes, what he thinks he needs to keep him large.

What interests us here is that when Pope Leo III was pushed around by his enemies, Charlemagne took the Pope's part and made the Pope's enemies his own. Leo was so pleased with the result that on Christmas day 800 he placed a crown on Charlie's head and shouted: "To Charles Augustus, crowned of God, great and peace-making Emperor of the Romans, may God give life and victory." It is to be noted that the Pope adopted the tactics of Moses. God did the crowning. Thus the Holy Roman Empire was born. It proved not only holy, but as time proved, actually sieve-like, but it must be said it held water during the lifetime of Charlemagne. The chief result was Constantinople not only had a rival but what hitherto had not been true, the western tail now vigorously wagged the eastern dog. Charlemagne failed in building a united nation that united themselves with any degree of enthusiasm. The whole thing was politics and not a part of the Church even though a representative tried to control or appease the political boss. Politics of whatever variety is perpetrated only by power. Oratory which seems sometimes to be the main thing is emitted only to drown out the sound of the machinery underneath when the bearings get hot. The modern murderer uses this tactic. When he wants to murder friend wife he turns on the phonograph so that the protests of the lady will not annoy the neighbors. It takes a kind heart to find the little good in some scenes. Thus it requires careful study to appreciate the notable result achieved during this period. It inspired Dante to write the Divine Comedy. This firmly established hell and he with Milton furnished countless ministers pyrotechnics for frightening small boys, but it also furnished a valuable idea for anyone who could use it. It served as a phonograph to lessen the sound produced by the profanity of the dog fight.

After the death of Charlemagne the small nations made merry among themselves and the Christian church again became the mainstay of civilization. It may be noted here in all reverence that even when we ascribe an achievement to God it may take a lot of human effort to make it last, not only to last but even to begin. In other words this is just another instance in which it is shown our faith may need to be backed up by the limit of human effort, and the most efficient tools available.

Churchmen believe in the efficacy of prayer but when they need real efficiency in any particular line of cussedness they do it themselves. That is the history of the Dark Ages. The Old Testament is the laboratory manual for the technicians in the Dark Ages. Anyone who does not like this statement will be horrified by carefully studying the two side by side. The mildest example is say compare "Vengeance is mine, saith the Lord. I will repay" with the records of the doing about the "Peace Table" in World War I. Our poor President Wilson thought he could change the sentiment by the application of Princeton University civilization. He was a historian and should have known that all moral sense is lost when mass murder makes a profit motive possible. Dark Ages to date, and we face we hope soon a new peace table. The bulging foreheads of the starry-eyed optimists think they can change all this by feeding milk to the babies of the world.

III

A new technic which was invented at that time had as its basic idea to advance beyond the Mosaic teaching. A great Englishman came to the fore. He was Alfred the Great. The Danes had been baiting the English, just like Danes, so Alfred got himself an army and made meek Danes out of them. He was

the original Englishman. He never told God anything about what he wanted done. He did the telling to the Danes. God was his recording secretary. He made Christians out of the Danes in a literal sense and took them to England and made them hoe potatoes for Alfred's subects. We recognize the pattern today and it has never been improved on. This illustrates a very important fact. A division of labor is necessary, one to do the talking to God, the other to make it come true; the result—great archbishops to make the conventions and great admirals and generals who get results.

This idea of Alfred's resulted in the origin of a familiar figure of speech for there followed some centuries of outrageous doings which proved nothing but what Alfred the Great already knew; namely no matter how ornery a people, you can make Christians out of them and make them hoe potatoes. Thus it came about that when one speaks of making a "Christian" out of someone, it should be designated whether ecclesiastic or military.

We come to another epochal period. Though the Romans continued to make "Christians" out of their enemies it was discovered that they were only doing so figuratively speaking as above noted. It occurred to one of the greater names in history, Pope Gregory VII, that somewhere along the line the spirit of Jesus had been lost so he began to sift the ashes in search of the lost spirit. Gregory was no shrinking violet. He declared that he intended to rule the world. His idea was good but he took in too much territory because it was not clear in his own mind what kind of Christian he was going to make out of them. Henry IV being German raised that question. This was made evident by the fact that when the Pope got fresh with Henry, in exasperation he, of the

second part, took Rome and burned much of it up. Gregory left what remained of Rome and died in exile. His last words were: "I have loved justice and hated iniquity, and therefore I die in exile..." This shows that even great men may do their best and find in the end that their best is not good enough, either that or the end they sought was not good, and turned out to be too good for them, or better than they deserved, or they lacked the needed tools, or something.

As noted before the spirit of Jesus was lost and it seems that even Gregory could not retrieve it. Many despairing persons started to formulate substitutes. These are heretics. A heretic was one who inquired whether the Christianity of the day was really the religion of Jesus. The clergy could not be called heretics because they had all the matches. Their technic may have been necessary, we cannot judge today.

I noted above that church dignitaries tried to be decent and keep people in line by moderate means, but when heresy on the part of others became more threatening it became necessary to get rough. The clergy were forbidden to shed blood, so they burned the heretics. Property was to be confiscated which made business good. Two hundred thousand joined the gold rush and "every living thing is put to the sword" and 500 castles were razed, that is to say they were flattened out. One interesting utterance stands out. Abbott Arnaud, the major-domo, cried: "Kill on; God will know his own," so that if any innocent persons suffered it was God's fault.

It is sad to note that these two examples of men who tried out a new idea failed to make any great lasting impression on the course of the world's history. The idea of accomplishing One World by inspiring them with a desire to be civilized, or by feeding the

babies milk is original to say the least. No one has figured out how much milk it would take to do the job, and just how one would get the milk to the doorstep every morning.

IV

Now comes what some people think was the darkest chapter in history, the Inquisition. Nothing will be gained by entering into details but it has its humorous side. Mr. Lea wrote four big volumes about it. Obviously he did not intend to like it before he started. If you got yourself interdicted you were denied the benediction of the clergy when you died, and you could not be buried in holy ground. If you wanted to get married you had to go to the Justice of the Peace or hire the lady as a cook. That was a terrible pronouncement in those days. Now the nurse watches us breathe our last, calls the mortician after we quit breathing and he hauls us to the crematory. Times have changed.

The Inquisition is history and every normal mind wishes it could all be wiped off the records of the world. It represents the infernal in human cussedness. Yet let us not forget that in this mess, the lowest that any man has descended, we all must find our ancestors. We cannot ignore this history because religious intolerance still abides with us. It is as impossible as ever to distinguish between the doings of the churches and politics. There would be less acrimony if we would read history. It would be found that some of the popes, like the Romans of old, tried to deal with the opposition with a certain degree of conciliation. Unfortunately the best element in society is always in the minority. We start with the wagging of the jawbones of asses and end it with artillery and the Peace Table and the quotation above noted.

I mention this because it gives us a more charitable view of the massacre of St. Bartholomew. That expression is confusing. Mr. B. did not make the conflict, leastwise he was a saint and it was not in his honor. It just happened on the day of the year when he got his degree. It would be too much to say the opposing party needed exterminating but they did some provoking things. It is further worthy of note that the party exterminated did just what we did during the siesta called peace. They made large talk, acted belligerent without the necessary tools with which to make their brags good. This was a mistake. A great philosopher once said it takes a great mind to find a big worm in a small apple, or words to that effect. The important thing is that a study of events will convince anyone that the happenings were due to an explosion and not a premeditated mass murder. It really should not be used as medicine for either party. Really a massacre is such only when the other party wins, otherwise it is a victorious battle and we pin medals on the leaders.

Furthermore it should be remembered that this and other atrocities were not done on papal order as prejudiced historians state, but occurred despite papal advice of moderation. The matter is a bit complicated. His holiness advised just quarreling, no murder, but when he heard that the Calvinites got licked he laughed. So would I if I had been around on that date. I do not like Calvin either because he got rough with one of us doctors. I have read much with a scientific mind and I believe this is a fair conclusion. Of course there were glaring exceptions but this screed is bad enough without dragging them in.

The most sanguinary event we know of was done at the instigation of others. The Spanish inquisition was ordered by a lady, Isabella, and her husband, Ferdi-

nand. There were some extenuating circumstances. Those who were blotted out really asked for it as was true in the event above noted in memory of Mr. B. We are doing the same thing now on less sharply defined lines. Centuries from now historians may be as puzzled about us as we are about ourselves. Besides we must feel some kindness for Isabella, because she made it possible for Columbus to discover US. The failure to do that would be regarded by all of us as a personal misfortune. On the other hand if we had stayed over there we would have saved transatlantic travel in order to reach the place where liberty must be won today. History is so confusing, one cannot tell what would have happened if the happenings had not happened as they did. Future generations may be traveling over the sands of time, and Africa, seeking the grave of Grandpa, and the liberty he won.

That little affair in Spain is supposed to have been a Church affair. It was not. Ferdinand needed a lot of bolstering for his throne so he let out a howl for liberty; that is the liberty to keep sitting on his throne. That was all there was to it. The reader must not become confused in the dates; that happened in the Dark Ages. There really isn't anything new under the sun. Ferdinand complained that it was the Jews who threatened the liberty of all the people. Funny thing, I have sometimes wondered when reading history that there was no complaint against these people so long as everybody just wrapped a sheet about himself and he went forth. This just naturally leads us to speculate if there will be less racial acrimony now that we seem to have come back to the point of starting, from jawbone to curves, unobstructed by any clothes. It was not Christians that he used in his scheme but Jews. They were so in-

telligent and energetic that it was the popular thing to chase them hence. He knew that it was silly for a regular Spaniard to set up a clothing store across the street. Ability and energy would put them out of business. That was what constituted the atrocity. We doctors may feel a sense of amusement because the smartest of the profession was a Jew so Mr. Ferdinand kept him because even royalty may get sick. That shows he was a wise man because he later developed a stomach ulcer.

Above I referred to the Inquisition, not too seriously, because it was something that could be applied and removed by correspondence. This has a modern setting in that you can now be healed if you are well enough heeled to stand the expense not only by correspondence but by wishful thinking. Nothing has been said about this being evidence of Dark Ages down to date. At least you can believe it or leave it but if you do you have inherited the Dark Ages. That was all right, as it turned out but when they came to applying it to individuals it really made the age dark. It seemed necessary to keep people in line. It was the remodeling of the beliefs of the heretics. We can see the technic in the execution of the witches in our own fair land. If we can wipe that blot from our slate it will help us forget the persecutions of others.

V

After we have been duly horrified by these puerile attempts at mass murder we are asked to look at something milder. The sale of indulgences is supposed to fill us with horror, but it was not so bad if one follows the subject with an open mind. Possibly the reader may have tried to buy one this morning by presenting the need of new fishing tackle. An indulgence means you pay beforehand for the cussed-

ness you have in mind. An example in modern setting I saw when I was a boy. In that day if several parties had a grievance they took off their coats and proceeded to right the wrong. The price was five dollars to be paid the Justice of the Peace by the party coming out best. One bellicose individual one day visited the Justice and laid down five dollars. "Who have you been working on now?" asked his Honor. "Haven't yet," was the reply; "I am on my way down to reorganize the topographic geography of John Doe's map." That was all right in that day. That was an indulgence, a prepaid fine.

When we trace the indulgences stunt down to our time we come face to face with a very unpleasant fact. Somebody has left something on our doorstep. Salvation by faith is the sale of an indulgence. Sure, stating it thus is not attractive. It is not of the future but is retroactive, one can sin if he knows how, and then come back and get more salvation by faith after which he may start out again. It is an indulgence paid for after the act and has the advantage, theoretically of course, of costing nothing, as some ministers complain.

The old revivals did the business in a wholesale way. Every community has had examples of instances where the carrier of the plate extended his sphere of influence and skinned the widow and orphans, not to mention other diversions calculated to emulate the achievements of Solomon. The only handicap was the Civil Law. Even if the law did catch up with him, more salvation was available on the original terms. One cannot call that a sale of an indulgence because there was no monetary consideration, it was free. We can imagine Peter at the Pearly Gates marking up "No Sale" on the cash register.

VI

I have a book before me written centuries ago, compiled and translated by J. Baker, 1734. To cite a case, the presentation is a bit paraphrased I admit but it ran something like this: John Doe remarked, it is alleged, that Moses was something or other. This remark was overheard by a person who told someone else and he told some ecclesiastic functionary. Said functionary had the culprit brought to him and he delivered himself of the following: "You said you did not understand Moses. You are guilty unless you prove yourself innocent. Bring on your witnesses but I tell you beforehand it will do you no good. You are going to burn, and your property will be confiscated and will be diverted to where it will do the most good." That is a terrible scene. Burn he did.

Nowadays it is different. You are told that you are suspected of holding out on the last pair of pants you bought when you already had a pair. You are guilty until you prove yourself innocent but you can't do it. Both pair of trousers will be confiscated, and there is now a priority on barrels. Burning is now but a figure of speech. Verily times change, but the spirit endureth, meaning by that the Mosaic idea is still with us. Formerly it was one who had ideas who got burned; that was ecclesiastic. Now it is one who has tangible or intangible assets, actual or hoped for; that is politics. But it is still a part of the Dark Ages not only to date, but four times a year.

It so happens in history when a general practice or movement culminates in a point of disaster some party appears to absorb blame, and be the goat. For instance our President planned to get himself a job. Fine; he got it. That is where his planning stopped, temporarily. Then came the spirit and times of just stretching mouths wide open. Everybody contented,

mouths open, palms up. The President said gleefully: "We planned it that way." That was a mistake. He had inherited the mess that had been planned for centuries: "Prayer will prevent war; faith will save your soul." This is the planning that blew up in his hands. Then he really planned, intelligently and courageously. How much help he had and what the result will be only time can tell. Dark Ages not only to date but they cast an ominous shadow on the future.

VII

The purpose of this chapter is not to recall the Dark Ages as they were in the past but to try to throw some light on the darkness today. But it is necessary to glance at the past to build a background to give my opinion force. One of the great men in history was Pope Innocent III but apparently he had weak eyes and the light hurt them. A diet of carrots I may say in passing might have remedied that photophobia. Be that as it may when some persons got ideas of their own the lights annoyed him.

One Peter Waldens was a man of means so he got rid of that according to biblical dictates and started to preach the gospel which was all right but he got to preaching the Gospel not of Christ but of Jesus, and paid particular attention to the Sermon on the Mount, and women came to listen, and when he had some following they called themselves Waldenses. He asked the eminent ecclesiastic above mentioned if it was all right. He was forbidden to preach until he had the sanction of the Church and a committee was appointed and they excommunicated the Waldenses, which did much to make them popular. Finally they got the idea they could administer their own sacraments and collect the fees thereunto appertaining.

There was another bunch called Albigenes who declared against the Old Testament and said they

would do their own sacramenting. They were inquisitioned and one party, One-eyed Hans by name, got the people to treat them as heretics. Frederic II promised protection for all those in Germany. Then they began to call each other names. Innocent III tried to placate the discontented but it was decreed that laymen were not to possess the Old and the New Testaments, only some writings in Latin which was a great help to the Germans.

It takes countless books to tell all about this but it all sums up to the fact that only the clergy can administer the sacraments. Now my suggestion is that inasmuch as a sacrament is a "visible sign of inward spiritual grace," which if you have the outward and hand it over without hollering the inevitable will naturally follow. That is the ecclesiastic slant. Fork over or go to hell. Politics is based on voluntary contributions. Contribute or grass will grow on Main Street.

I mention these things merely to show how the past and present link up. Dark then, dark now.

What made the Church so cruel during the Dark Ages has eluded explanation, no one has attempted to explain it. That is of no interest except we must imagine if that influence still keeps this day dark.

In the study of history one must check occurrences against the practices of the times. Of all religions, ours always has been by all odds the most cruel. It was based on murder and sex. Sex was expressed in poetry and song. Modern writers have vainly tried to make events decent but have only succeeded in making themselves ridiculous. A recent writer has sought to make of David a decent character. Of one fact as related in the chapter on the Genesis of Moses he notes that David was quite a person to the extent of all available adjectives. He notes that one day his hero while

admiring himself on the top of a house, spied a lady in a yard taking a bath. He sent a servant to invite her over, a bit forcibly to be sure. They had a fine time though and a son was born. The author admits that was not exactly nice but he excuses David by pointing out that the lady was streamlined and the color of ivory—soap I reckon for we are told she was taking a bath. David is to be excused because he was just so full of love he could not help bubbling over. I once served as officer of the court at the hanging of a gentleman who also was so full of love of the female form divine that he bubbled over and killed her. David put the lady's husband, one Uriah, in front of the army and got him killed so he could keep the curves. Those were not dark ages; it was all right then.

This gives us a key to why the Dark Ages were so cruel and why they are cruel still. Sex rampant was fine then; today it is not nice and must keep somewhat hidden.

Some ten years ago one of my most learned and sincerely religious friends exclaimed in an agonized tone that the "trouble with the Church is it began as phallic worship, developed in the depths of sadism and has remained so." I was shocked but with the passing years it seems that this is the only explanation of the cruelties history relates. Let those read history of the Dark Ages if they would know the depth to which sex cussedness can reach. Nobody would want their children to really read the moral cussedness as expressed in the Old Testament yet we base our teaching on that very foundation. We might get sex worship out of our religion if we moved off of the basic idea of sex. To paraphrase a bit it seems "we assume a virtue though we have it not."

We doctors see the human as he is more clearly than any other class of persons. Besides we learn to see things as they are whether we like them or not. I shall confine myself in the following remarks to the events as they have come in the light of my own experience. We are told by those who observed the events of the old revivals, particularly the campmeetings, that they were little less than sex orgies. I saw them in my childhood but did not understand. I was taught they were just manifestations of grace as John Wesley taught they should be. As a practicing doctor I learned the difference between excitement versus the manifestation of grace and hysteria. Also I learned something of the byproducts not usually associated with hysteria. Of course I hasten to remark that is all for the best, but yet religion thrives best on excitement. In passing I would remark that religion by excitement is different from religion by education and compulsion. All has dwindled to a faint flicker and all camp meetings are nice now.

We see religious excitement again in a different form when in wartime there is a resurgence of religious enthusiasm, which some ministers note with delight. One chaplain gleefully announces that a homesick soldier makes fine material for proselyting. The clergy are quick to translate any exclamation from a foxhole as a manifestation of the acknowledgment of a recognition of the God of Moses. We are gleefully told that they diligently read their Bibles. Just what do they read which gives them comfort? We all see dark days when we cry out in our innermost souls. I have heard many times "Oh doctor, you must save my baby." How does a doctor feel at such times? He wishes he could pass the cry on; often he does and calls in another in consultation but the one consulted must take the responsibility. So we

must ask whether the clergy are seeking truth or only looking for something useful for propaganda.

The war babies mothers encouraged in World War I certainly were dark. We see it now. It simply indicates the close relationship of sex and war. Now the police are wringing their hands because the girls are agitated. Mothers are not encouraging war babies. They just turn the kids loose. Poor kids, no mother; only a female who bore them.

But there is a far finer side that should not be overlooked. The 'teen age when sex first blooms are most affected by the glamour of war. This is the age when a life devoted to the Church is most attractive. The one is as noble as the other. The young girl away down in her childish heart sees the promise of a baby of her own going away on the troop train. And she is exactly right for every soldier boy who will stay in a new Flanders field will leave a childless woman. We doctors are still battling with the war widows of World War I. If anyone on this green earth deserves the heartfelt sympathy of understanding persons these are the ones. That newly awakened sex urge in the young girl envisages the mother and her babe first seen in the Egyptian home. The one girl envisages her baby going away on the troop train, the other girl sees it in the infant Jesus in the Virgin's arms. They need our sympathy and understanding.

We doctors see life whole and could tell people a lot if we could escape the counterinfluence of the clergy. They have the backing of a future in hell while we doctors can only point to a life of unending grief if they defy the laws of nature; or listen too attentively to the teachings of Moses.

The most emphatic law of nature is that each creature must reproduce its kind. The bull in the pas-

ture represents the highest type. He reproduces only on invitation. He hates only if his self-imposed duty is threatened.

The human could be as decent as the bull if he were properly educated. If he were spared artificial excitement in his environment it would help. Don't blame Mr. Man, the poor nut does not have a chance but despite the opposing factors there are many of him wholly decent, with a clear vision of the sacredness of mother and her babe. The number is increasing. Far be it from me to suggest that the number increases as the influence of the church lessens but the marriage ceremony has been reduced from two hours to a few minutes and the adding machine as evidence of grace is not mentioned. That men are becoming more decent my casebooks show. As to the influence of the church of today, my casebook is silent; I have worked at my profession seven days a week for nearly fifty years.

Strictly speaking as a doctor I know the penalty persons pay when for any reason they defy the laws of nature to reproduce their kind. Some find expression in hate of some form. The inevitable end of frustrated sex obligation is hate. Others mother other mothers' children, or some person such as an old parent, some only a cat but it all helps. But we doctors know that they still hate the fate that denied them a child of their own. It is a silent hate, the problem of an understanding doctor.

What made the Dark Ages so dark is because we followed Moses and his inspired ones. If we had stuck to mother and baby; if we would but listen to the God of music, beauty, poetry and of truth as the God of science tells us there would have been no Dark Ages in the first place and the dark ages of today would not be.

VIII

Dark pages of history are being written now. The darkness is fairly decent, only a faint tinge of a by-gone age comparatively speaking, but the elemental factors still pursue us. We have veneered the mess in a skillful way made possible because the stench is less, and becoming even more so, but it still smells. That is to say it is fairly safe on the home front. We are riding the rough stuff vicariously. But our boys have mothers, and they suffer more than those who were skillfully executed by the old technic. To them the age is dark.

Now we are buying bonds for a just cause, namely to save our skins and to ease our consciences. We can appreciate now how churchmen felt when they got rough with scientists when they got to moving the world around. What the verdict will be when the boys come back and talk things over with Mother must concern us all. They are fighting for liberty, they are told. Just suppose that when they come back with the idea of liberty they start to liberate themselves from those who sent them over. They learned to sing our National Anthem in high school "Sweet land of liberty" and they had to chase it half way around the globe.

The boys will understand that our present situation was due to stupidity which made it necessary for them to be suddenly re-educated for death. They will know a lot about airplanes and will remember that many farseeing men saw impending disaster and wanted to build airplanes to prevent what happened. They may want to know why this neglect.

I heard a distinguished newspaper man say a number of years ago that the peace of World War I made a renewed war inevitable; that the peace was dictated by greed and hate. The clergy were not

invited to sit in at the conference. When politicians face the pie counter they know no church. Now please note we have a dark period for which no church can be blamed. They prayed to prevent World War I and they did the same to prevent global war. They only did what they were taught would do the trick. Obviously they had the wrong number. I feel a sympathy for them for I once used sulphur as a remedy for diphtheria. Sulphur for diphtheria, prayer for war all proved obsolete by test, leaving only salvation by faith. The stimulus which leads doctors to the discovery of a new remedy is the realization that the old does not work. This spirit replaced sulphur by antitoxin in the treatment of diphtheria. Thus the darkest chapter in the doctor's life is now one of the brightest: "Bring on your diphtheria and I will shoot it with antitoxin," the modern doctor joyfully exclaims. I have lived it all in my early days. Out of darkness into light!

The clergy sit tight in the study of the prevention of dark days. It is more than a neglect of duty, it is desertion in the face of the enemy—treason.

The politician is taking over more and more what was once more or less influenced by the churches. They gave the clergy a nice bunch of mud to make pies out of while they work underneath. It is they who demand the attention of every one of us. We are governed largely by a bunch of amateurs chiefly interested in keeping on being politicians. It was said of one of our presidents of a generation ago that "He is an amicable gentleman surrounded by those who know what they want." Now it seems we need to import foreign experts to tell us what we want.

What can we do about it? First of all be honest enough to recognize the truth. To assume a virtue

though we have it not is out. Churches are the permanent repository of hate today. No one will question the truth of this statement. Hate makes war.

The most unpleasant task before us is to study honestly the relation of sex to religion. Now is a good time to study that problem. Love is replaced by lust which obscures the view of the Jesus concept in the mother's arms. I have no intention of doing more than just stating the problem. A scientist knows the difference in relative density of his cranium and a stone wall.

Before we change our way of life we must first see the need of it and then the solution will quickly follow. The question is whether the church would choose an indefinite continuance of the Dark Ages rather than give up mysticism and taboos and the hates for each other, which their creeds demand.

Compared with fifty years ago one notes in the clergy the emergency of an educated order compared with the arrogant ignoramus of the past. But this is a regional difference. In the more cultured communities the clergy have been educated for a long time. There is a slight lessening of the rigid laws, a slight bowing to the pressure of public opinion. But fundamentally there is no difference and an emergence from the dark ages demands a building on a new foundation. What little evidence of light there is develops in the individual, in our personal conscience. We have some hope the mother and child may stimulate enough individuals to make a new world. Just wait until the boys come back. Furthermore picture the mothers whose boys are not coming back. They come to their doctor. I can read their faces as they come in, silent. I know already that John died in North Africa, Will lost somewhere—dead or captured. I know it all. I do not dare to

trust my voice. Soon comes in the gentlest voice "Doctor, I just can't sleep." I suppress what I would exclaim: "Good God, is there no ear for the mother's prayer?" I know there is not but there is another God, the God of science who has heard such prayers and I give her a sedative, developed for us by chemists. Funny thing; I have thought much about it. Mother is dry eyed, while father may shed copious tears. The father may learn to smile again but the mother, never.

Science has backfired for civilization. Fundamental beliefs expressed in organized hate are now more tragic since science and invention have supplied the means to make more destructive the elemental hates. Even so bombs and poison gas are merciful compared with the rack of the Inquisition in all its forms and slow burning inflicted on Christians by each other in turns. Thus it comes about with our advancement often the pain of death has been lessened. Yet in so doing we succeeded in making the Dark Ages yet darker because it is the living who suffer. My casebooks record many hundreds of cases. It makes me sick at heart, also mad.

There is one notable difference between the last war and this one, an army officer tells me, and that is the absence of hate. The soldier of today he tells me, does what he has to do, because it must be done, in a perfectly workman-like manner more like a surgeon operating on a cancer, or a peace officer who shoots when he must—he shoots the straighter because he has no hate.

I was thinking of this fact yesterday evening as the sun was setting. There was a haze, you could just make out the outline of the descending orb. At this moment there came puffing out of a cut from the east a double-header train, both engines emitting heavy

screens of black smoke as if to obliterate the outline of the cars behind, just as though they were ashamed. No wonder: they were pulling 20 carloads of soldiers direct into the haze of the setting sun, there and beyond; even the dumb engines were apologizing for the work they were engaged in. Not a boy knew where he was headed for, nor for what purpose. As the train passed the black smoke lingered. Then the smoke cloud lifted from the disappearing train showing its red tail lights, but the whole picture was that of the Dark Ages. Glory hallelujah, the boys are going out to kill!

What were those fine brave boys thinking of, I asked myself in deepest grief. Who are the emissaries on that train? One could fairly feel the rancorous laugh of the politicians that anyone should be so dumb as not to know. I got to wondering how many ministers were shedding tears because their prophylactic measures against wars failed again; how many were thinking of some measure that would work better?

To bring light into the Dark Ages everyone must want light, be willing to eliminate the things that make them dark and keep them so. The causes are clear. The remedy simple in principle, difficult of achievement only because it means the recognition and elimination of long cherished beliefs and hates. To pray to the God of Moses for peace is silly; he gloried in killing. That God is good is the idea of modern clergymen. They just got ashamed of the God of Moses. Cannot clergymen build up a God of kindness and mercy and love? Throw away all of the Old Testament as Lyman Abbott proposed more than fifty years ago and then start all over again.

To cover up the derelictions of the past we holler "patriotism" to high heaven. The word *patriotism* covers a multitude of emotions and furnishes one of

the major tragedies of war. Patriotism simply means an exalted emotional state which makes it possible to acquiesce to the recurrence of the dark ages. The spirit is necessary in order to correct the disease which we allowed to infect us. It is a sort of moral delousing, in inverse ration.

IX

As a laborer in the field of scientific medicine I claim the right to be heard. I have seen the development of a science that has all but conquered disease. Sure science has all but eliminated disease. Everybody can see that. The science of medicine is given a gesture in the calling of 40,000 doctors to lessen the destructive element of war. This is the same recognition that is given the door mat labeled "welcome." The irony of it is that even as these men are serving the medical profession one is given to understand that they must learn to bend the knee, something they have refused to do since Servetus cried to Jesus as the flames destroyed his life. But destroy medicine and disease and pestilence will return and so will the prayer "God save our children from diphtheria."

The scientist has escaped from the Dark Ages but he must realize that the dark Ages may again engulf him. Politicians are planning now to take this science from him and enslave him to their benefit. But the God of science will not be enslaved. Suppress the doctors and within fifty years disease will again be rampant as of yore. War will then not be needed to kill off so many—disease will do that, as it does in India today.

But the scientist's life is based on the belief that hope is justified if one continues to work. Doctors feel that when the boys come back after contact with doctors 40,000 of them who have lessened death from wounds from 60 to less than 2 per cent, and have

eliminated death from infectious disease, they will have something to say. As noted above they may even ask to be liberated from the influences which made it necessary to do what they have done.

If all the human race is ever to see the darkness vanish, the light of justice and love come to shine, it will not come through either the devotees of the church or through politicians but only devotion to the God of nature offers refuge. Science more than any agency has made the world what it is today. Descartes wrote "If ever the human race is raised to its highest practical level intellectually, morally and physically, the science of medicine will perform that service." That sentence was written long ago. Since that day all science has joined with medicine in the upward pull. Darkness never was except as the human race decreed it. In the name of the God of science, let the barnacles be pried from our ship and allow it to ride the waves untrameled. Let it float majestically and *darkness will be no more.*

CHAPTER XII

DARK AGES IN MEDICINE

When scholars write about the Dark Ages they mean the doings of people at a certain period. They commonly say it was the doings of the Church. This is unjust because the worst done was committed by those only remotely connected with the church. It was much as it is today, same church, more politics, mostly pure cussedness heavily overlaid with hate and sex.

This chapter has to do with the Dark Ages as it pertains to doctors. In the development of my theme it will be necessary to complain about the doings of the Church but at the same time I shall have much to say about what the Church did for us. On the whole the Church did not notice us as long as we did not dabble in the affairs of the Church. When we did they treated us no worse than they did other churchmen.

The Dark Ages as it concerned us simply means an absence of light. We had no light because we were dumb. We adhered to a lot of fool things we both did when we were one. We had not yet learned that the first step toward light was to discard false beliefs. We had distinctive clothes and made a lot of fuss just as the Indian medicine man does today. As a substitute for knowledge we used our egotism. This caused us to believe that when a patient did not die it was due to our fine skill. We believed that when we had dreams it was some spirit talking to us. Likely they were due to eating too much raw meat.

I

I aim to cover here the period beginning with Hippocrates and ending with the elimination of Servetus. We have here a very definite time limit. Hip-

pocrates was the first to seek truth, to study the sick human, to find out how and why he was sick. He planted the little tree that has grown into the sturdy oak as we see medicine today. Servetus was the last of our profession to be physically burned, since then "burning up the doctors" has been only a figure of speech. It was possible to eliminate Servetus but not the sturdy developing truth.

The relation of the old medicine man to his people is sufficiently indicated in the chapters on mythology and that on beginning medicine. This allows one to understand a possible cause for the absence of light.

In the study of medicine we begin with a mythical figure, Aesculapius, who is still with us for we still retain this symbolism in the snakes in our caduceus. We still bear this symbol on the license plates of our cars, evidence to the police that the man driving the car is a doctor and is hurrying to a patient who likely is mythical, possibly he is headed for the golf course.

This same Aesculapius had two daughters, Hygeia and Panacea. They also are still with us. Hygeia represents preventive measures as we use the word "hygiene." Panacea is used today to represent a remedy which will cure anything, real or imaginary. But in the beginning these two were not regarded as belonging to us doctors. They had as orderlies, Apollo, Minerva, Orpheus and Chiron.

Vast numbers of temples were erected to Aesculapius. They are of interest still because patients were admitted for a day. Haggard describes the scene as follows: "At dusk the patient, dressed in white, lay down on a couch. Prayers were offered to the gods. The lamps were extinguished. Everyone was silent. Sleep came to the sick man as the priests had told him it would, and with sleep, just as they had promised, came dreams of Aesculapius and Hygeia, who

stood before him, ministering to him. In the dim light of morning he awoke, and there beside his bed he saw a priest dressed in the costume of the god. With the priest were a snake and a dog. The snake crawled across the bed, the dog licked his hand, and the priest asked him questions about his illness, gave advice, prescribed medicaments, and assured him that he would become well. The priest, the dog, the snake, passed to the next couch. The cure was completed."

Sick folks were supposed to go to the temples, but not when they were too sick because it was an insult to the gods to die in a temple. Since not all sick persons could visit temples, some priests had to visit them in their homes. Just what happened there is not clear but we are told the clergy gave up the practice of medicine at this juncture. The task was assigned to country doctors who went about visiting the sick in their homes. An old doctor understands; visiting sick folks in their homes is laborious and time-consuming business and the demands may interfere with other arrangements, notably sleep. Thus it seems we doctors were born to toil.

The gradual accumulation of medical knowledge became so great that the desire to tell others became so urgent that they founded medical schools. The clerical custodians possessed all the knowledge but really there was no knowledge for anyone to possess. Their claims were pure mythology. One does not need knowledge in order to teach, even today.

Sometimes teachers have students who go beyond their teachers. They had one such student at Cos. Our interest centers in this school because one of its students was Hippocrates. The trouble is we do not know if Hippocrates wrote all the books ascribed to him or did all the things he is supposed to have done. His contemporaries, Plato and Aristotle refer to him only as a prominent physician. This is not

strange because his methods were little calculated to excite the interest of thinkers who would accept the doings at the temples of Aesculapius.

Be this as it may Hippocrates established medicine as a science but no one realized it for there was no such word as science, which later afforded some such a terrible affliction. Therefore Hippocrates lived unnoted. He was born 460 B.C. His technic was wholly different from that of any of his predecessors in either profession. Hippocrates studied symptoms, facts, and his endeavors were all for the good of the patient. He studied and tried to find out the things patients complained of, just as doctors do today. After a time certain sets of symptoms fitted together and he diagnosed a disease.

"This great man Hippocrates enjoys the honor of being the first to rationalize medicine, to codify medical knowledge, and to establish the art of healing as one of the highest ethical and spiritual endeavors" (Seelig). Happily none suspected any such a thing. The spiritual finds expression only in deeds. The ethical ideals are expressed in the Hippocratic oath every medical graduate comes to know.

Seelig says further "that he is, above all, the exemplar of that flexible, critical, well poised attitude of mind, ever on the lookout for sources of error which is the very essence of the scientific spirit." Hippocrates was the first to discover religion in science, a striving for nobler things, a service to mankind, without any thought of reward here or hereafter.

With Hippocrates therefore the soul of medical science was born and we say farewell to dogma and belief so far as the doctor is concerned and begin the long tedious road of scientific medicine.

So lofty was Hippocrates' ethical sense that today his oath graces many doctors' offices and in some medical schools the prospective graduates recite it in

unison before they receive their diplomas. Those who sign the roster of the American College of Surgeons subscribe to its teachings. I invite the reader to compare this with the Ten Commandments of Moses. It is as follows:

"I swear by Apollo the physician and Aesculapius and Health and All-Heal and all the gods and goddesses that according to my ability and judgment I will keep this oath and this stipulation. To reckon him who taught me this art equally dear to me as my parents; to share my substance with him and relieve his necessities if required; to look upon his offspring in the same footing as my own brothers, and to teach them this art if they shall wish to learn it, without fee or stipulation, and that by precept, lecture and every other mode of instruction I will impart a knowledge of the art to my own sons and those of my teachers and to disciples bound by a stipulation and oath according to the law of medicine. I will follow that system of regimen which according to my ability and judgment I consider for the benefit of my patients, and abstain from whatever is deleterious and mischievous. I will give no deadly medicine to anyone if asked, nor suggest any such counsel, and in like manner I will not give to a woman a pessary to produce abortion. With purity and with holiness I will pass my life and practice my art. I will not castrate anyone, not even those laboring under the stone, and will shun men who are practitioners of this work. Into whatever houses I enter I will go into them for the benefit of the sick, and will abstain from every voluntary act of mischief and corruption, and further, from the seduction of females or males of freemen and slaves. Whatever in connection with my professional practice or not in connection with it I see or hear in the life of men

which ought not to be spoken of abroad, I will not divulge as reckoning that all such should be kept secret. While I continue to keep this oath unviolated may it be granted to me to enjoy life and the practice of the art respected by all men, in all times, but should I trespass and violate this oath, may the reverse be my lot."

It is the thrill of my life to hear my nurses recite a modification of this oath on graduation night. It is to me very impressive for the nurses recite effectively and convincingly. They share fully the spirit of medicine, they are part of our lives, as they are of our profession.

The decline after Hippocrates was inevitable but was relatively brief. It was not due to any oppression but because mental giants are events in history. This is proved by the fact that many hundred years later another great figure, Galen, appeared. Galen was born 130 A.D. He was primarily a student and spent much time in his early years dissecting swine and apes. Seelig says "he was himself a large-sized bundle of conceit," but conceit is often the spring-board of supreme effort. This found expression in the recital of his own remarkable career. One is rightly suspicious of anyone who writes an autobiography. This characterization is interesting because one encounters several vocal biographers in any staff room of any hospital any day. But Galen did things.

Galen's power it may be noted lay in the fact that he was a devout monotheist in harmony with his times and became therefore an object of almost veneration because monotheistic worship was a part of the times struggling for recognition. It was easy in those days for anyone with imagination and lung power to establish in the general mind his own estimate of himself. Thus the private opinion of Galen

became unanimous. Anyone so elevated is apt to suffer from the overstatements of admiring friends. They credit him with having written 500 volumes but there is proof of his writing only 180. The number and size of the pages in each volume is not known. What he did in his spare time is not stated. Much of his writing had to do with the work of Hippocrates. He was smart enough to know that once one has an exaggerated reputation one can safely give full credit to a predecessor who is dead, hence his friends credited him with excessive modesty which inflated him still more.

It was easy for him to use the technic of Moses. He hid behind the reflected light of a greater one, namely Hippocrates. Galen adopted the methods of Hippocrates and attempted to restore it to the state it had achieved at the death of the great master. He lacked the inherent honesty of Hippocrates. Of course he fell far short of it or he would not have written so many books. Like the smart man he was he praised Hippocrates with so much assurance and glamor that "he accomplished the incredible fact of mortizing Greek medicine into history for a thousand years and of establishing his own authority so securely that it withstood all the vicissitudes of ignorance, superstition, reversions and degradations in which the world was steeped from the downfall of Rome until the Renaissance of learning over ten centuries later" (Seelig). In fact he did such a good job that after the revival of learning he was so well established that it was a sacrilege to doubt his teachings. But compared to Moses Galen was a piker; Moses' teachings still go on.

Though Galen lacked the great mind of Hippocrates he did much to supply the deficiency by the fact that he did some experimental studies on his own ac-

count. Galen meets the medical student of today because of his very clear description of the process of inflammation. Swelling, pain, heat, redness and disturbance of function. His description is so clear that one is disposed to believe that he had entertained some boils in his boyhood.

Garrison ascribes the reason for the long reign of Galen's authority to the general spirit of the times. Everybody was under the ban of authority. He states that "The Church, with its spiritual appeal, its attractive symbolism, its splendid organization and its consolidation with feudalism in protecting Europe from Moslem invasion, could not but triumph." Thus it came that the authority of Galen basked in the Shadow of Theism. It was at that time not only profitless but already sometimes unsafe to think.

Much the same pattern was followed which resulted in the division between physician and surgeon. We must notice that if a person was facile of speech and had an aversion to soiling his hands he was a physician. To touch the human body was unclean and unholy and those who stooped so low as to suck boils were surgeons and in consequence were treated as lackeys and inferiors. As further humiliation surgeons were classified with barbers. Even so late as the time of Frederick the Great it was the duty of the army surgeons to shave the officers of the line. How slight this separation has been when doctors were scarce we see in signs in all small towns: John Doe, Physician and Surgeon.

II

Nowhere do we find the entrance into the Dark Ages so well expressed as is done by Seelig: I quote: "Now we are confronted with the sad task of witnessing a fading out process. All that Hippocrates and his loyal disciples had so patiently and painfully

dug out of impassive nature, all that Galen had added to this store of information, was shrouded from view for over a thousand years. The metaphorical phrase 'fading out' is used deliberately because as the light fades, darkness supervenes, and the thousand years between Galen and the Renaissance have always been known as the Dark Ages." Unfortunately this gives us no information as to the cause of the Dark Ages. Medicine was submerged but had no part in the process and for the most part did not suffer because of it, that is not yet because no one produced any threatening ideas.

We must stop to inquire just what to us doctors constitutes the Dark Ages. We see a gangrenous leg, the circulation has fallen down on the job, we amputate; or we are faced with a cancer, a cruel invasion of cells representing the ultimate in cellular cussedness. We cut it out. We see the counterparts here of the Dark Ages but we can have a look at the underlying causes dispassionately. We know the structure of blood vessels, the physiology of the clotting of blood and can visualize the failure of these to function, resulting in gangrene, death of tissue, which must be removed or the patient will surely die. On the other hand we do not know what causes cancer but we do know how it acts, somehow cells of which we are made break the bounds of orderly development and will most certainly destroy the patient unless our knife can head it off. It is a fight. Our knife must glide unerringly between the cancer and vital structures. Will we succeed? We do not know. It depends in part on our knowledge of anatomy, on our understanding of the nature of tissue growth, but beyond that we cannot go because we do not know why the malignant cells act as they do. We do know that we are fighting in the

Dark Ages of cancer with the hope of securing a brighter day when we will know the causes of the disease and will be able to prevent it. When we do discover the cause we can embrace it. Truth is ours when we see it.

With such a training no one is better fitted than the doctor to look at life at its worst, the Dark Ages. He of all persons can look at the gangrene of human society, dispassionately look at the process underlying, consider the line of demarcation where amputation must be done. The history of the Dark Ages is spread across the pages of every doctor's records. It is not only a history, it is a record of current events. Therefore doctors are prepared by experience to study the prolongation of the Dark Ages as they see it to-day. Therefore we doctors have need to study the Dark Ages in medicine to see if there is something in our experience which may be applied to civilization in general, for as shown in a subsequent chapter we have emerged from darkness into light. We can see how medicine struggled to conquer in great measure its own Dark Ages. It was achieved by the simple process of finding a truth and then adding other truths. It was a slow process. The prevention of disease was yet undreamed of, unthought of because disease was caused by extraneous causes; to chase out devils was not within the doctor's province.

Most of us, as casual students of history, have the false notion that the Dark Ages connote a sort of sudden rise of primordial ooze and slime engulfing the world, carrying utter intellectual destruction in its wake. The error is ours and is not referable to our teachers nor to our books. It is due to an inherent abhorrence of anything that threatens congenital concepts, threatens long nurtured beliefs. It is wrong to

ask people to think. Like playing the piano it is done better with practice.

The average person is unduly sensitive to the connotative significance of phrases and words. For example, the serious efforts of medical investigators would not be interrupted so often by municipal and state legislative bodies, if the phrase "animal experimentation" had crowded the word "vivisection" away from the baptismal font. But by that same token we may thank Heaven that, by common consent, we "operate" upon patients, in preference to "vivisect" upon them. Most of the confusion is associated with the horrors attendant upon the idea of cutting live things. Just think of it, surgeons cut on live patients. It would all be unnecessary if we just had enough faith. It is horrible to contemplate what utter depravity the human animal can descend to. Just imagine anyone using guinea pigs for the purpose of developing new truths. Why not use babies, they come free; guinea pigs cost half a dollar a piece, preNew Deal value. Such criticism is the spirit of the Dark Ages garbed in modern dress.

And so, also, the general confusion regarding the Middle Ages is largely resident in the unfortunate word "dark." What, after all, was this Dark or Middle Ages period, and what was its significance for medicine? The only significance to us concerns the degree to which medicine was suppressed during the Dark Ages of human society. It made us trouble to move around in the dark but we were really not a part of it. We doctors were of such little moment that the Church did not know we were also present. We had no science, no facts, not enough of anything to make of ourselves a nuisance.

To whom do we owe credit for being allowed to exist at all? This study is complicated by the fact

that foci of survival are so scattered over all the then known world that an adequate presentation would tire the nonmedical reader. I shall therefore confine myself to the following of trends with the idea of determining how we arrived at the point where we now find ourselves. Who helped us save the pieces?

Taken as a whole doctors have been generally recognized for about what they were worth. In the early day we did not rate very high. Rome for 600 years had no doctors. The people were afraid that the available Jews and Arabian doctors might poison their patients. They depended on diet and an occasional bath if the disease extended into the summer season. The fact is the people did not miss much. They were quite as well off without any of the doctors available. Obviously during that period we were just tolerated but it must be recorded it was not an act of generosity. They were so busy emulating the achievements of a bygone age that wine and women occupied all their time.

After a while we did better. Much happened between the sixth and sixteenth centuries of interest to us doctors, which we may now trace. History tells us the Goths and the Huns were most active in mixing things up for the Roman Empire. After they had fixed up Rome to suit their taste the barbarians either joined the church or intermarried with the Roman ladies. It is not recorded that any of them did both. Human capacity to absorb punishment is limited. We are not told which group of men fared the best, those who embraced the new faith or those who married the women.

The salvation of these barbarians we are told was the newly born Christianity. Despite their long blonde hair and ill-smelling bodies they were attracted by the pageantry of the rituals and the mysteries of

heaven and hell which resulted only in making bigots of them, and in proving that hell is no dream. In the history of that terrible period we must note the difficulty they had in determining what was pagan and what was Christian. It is difficult to escape the conclusion that Christianity is but a mirror of the advancement of the human race. To regard the reflections in the mirror as the causative factor has but delayed the recognition of the forces which really were operative.

III

But that picture is not the whole truth. It is pleasing to note that some of the clergy, despite the material they had to work with, did much to preserve the glory and culture of the past which included medicine. But here too those who contributed to the advancement of civilization worked as individuals. Somebody did something. We should remember with gratitude the services rendered at the most critical period of our struggles. Of course this was purely a byproduct. They did it not to help the useless doctors but for the furtherance of their cause. Too often the service of the individual was absorbed to further the dream of the Church for spiritual and earthly dominion. Only organized movement can suppress, and it seems such organized movement leads inevitably to the suppression of those things that are not in harmony with such movements as the organization desires.

The Bible, in the furtherance of their objective, was made the unquestioned authority for everybody, including the doctors. The Popes attempted the co-ordination of the Franks, Burgundians, Lombards, and Germans. Such a motley mess made this an impossible task. The result was that the church in defense of Christianity became the basis for bloody wars.

The Crusades, the outgrowth of noble impulses in the beginning, ended in one of the saddest chapters in history. It is the pastime for some people to blame the Church for the Dark Ages. They were in a terrible situation from causes for which they were not responsible. It is interesting how nearly parallel the same situation is today.

From the doctor's point of view they did very well to save us even a little. We remember that the clergy did a service by becoming the custodians of things medical preserving much from the barbarians, and the half breeds who came in the natural course of events, following marriage. We doctors are today paying on the old debt the Church rendered us in that period.

First of all the Benedictine order of monks rescued much medical lore. They transcribed the important medical treatises of the Greeks and Romans and later established regular schools of medicine. They reached clear down to the altruism of the present day in that they taught that the care of the sick was the chief task of Christian love and mercy. They made a gospel of the holiness of the medical art and practice, in fact they made of it a religion. It is the most tragic event in history that their bright light was dimmed never to shine again, that is it is not yet apparent to the public. The concept was fine, too fine to last. The beautiful colors of roses are unseen in darkness.

Nevertheless that was the beacon light that still beckons us. The world has not yet achieved the heights the monks conceived. It remarkable how they arose despite the Dark Ages. Yet that is a clinical fact which we doctors cannot treasure too highly because their work shows that the Dark Ages cannot hurt us if we attend to our own business. Our problem is to determine what they had in themselves

that made this possible and how we can make it visible in the present world.

In this study we can record a notable event which occurred at this time. It was the establishment of several large hospitals in Asia Minor, Egypt and Spain. These were real institutions as one learns from Garrison's description of one of them, the great Al Mansur Hospital at Cairo, as it existed in the thirteenth century: "It was a huge quadrangular structure with fountains playing in the four courtyards, separate wards for important diseases, wards for women and convalescents, lecture rooms, and extensive library, outpatient clinics, diet kitchens, an orphan asylum and a chapel. It employed male and female nurses, had an income of about \$100,000 a year and disbursed a suitable sum to each convalescent on his departure, so that he might not have to go to work at once. The patients were nourished upon a rich and attractive diet, and the sleepless were provided with soft music, or, as in the Arabian Nights, with accomplished tellers of tales." It was a burst of sunlight through the clouds of the Dark Ages. If we just knew the motivating forces which brought them into being we might do something to invite their return. There is none such now and we do not know how to bring about another. It is tragic to be compelled to note that we doctors had nothing worth while to contribute.

Our interest goes next to Salerno, originally a Roman health resort, which became the site of the first really important medical school in about 800 A.D. It served as a pattern for the foundation of other medical schools which still exist, notably Oxford 1167, Vienna 1365 and Heidelberg 1386, and many others. It should be noted that the most of the institutions of learning were established with Papal

sanction, a ray of light in the Dark Ages was reflected by the head of the Church. Here again we must confess we doctors were not prepared to do our part. We had nothing worthwhile to teach.

The school at Salerno was directed toward the practical side of medicine harking back in a measure to Hippocrates. The scientific subjects, notably anatomy and physiology, were neglected and stress was laid on the importance of the study of symptomatology, dietetics, materia medica and treatment.

It is interesting to note how some of their teachings in bedside manners have endured to this day. Physicians were taught that they should tell the patient that they most assuredly would recover but some relatives of the patient should be told that the recovery was very doubtful. The layman may need to be told the object of this guarding of both doors. If the patient died, the doctor was wise in the eyes of the survivors in foreseeing the fatal outcome, if the patient recovered the doctor was praised by the patient for his skill in treatment and in the associated joy his gloomy prognosis was forgotten by his friends. The doctor by such tactics, still in use, was lessening as much as possible, the mental suffering of the patient.

I digress at this point to show just how clever we doctors are. The old professors of midwifery were wont to advise the students when they were called upon to supervise at a blessed event that they look wise and listen. Usually by the end of five minutes it was obvious what sex of newcomer was desired, usually a boy. After a careful examination the doctor would gravely announce that the newcomer journeying hither was a girl. If this turned out to be the case he was looked upon as a most wise doctor, if the arrival announced by the tone of his voice that he was a male, rejoicing burst forth and the prognosti-

cation of the doctor was forgotten. Here we had the laugh on the clergy, on request they prayed that this home might be blessed with a male child. He was playing a 50-50 game without recourse. If after his efforts a girl arrived, was his face red.

IV

But to return to our study. Unhappily there comes a less pleasing state about the middle of the Dark Ages while the clergy, as noted above, after the fall of Rome did much to preserve a little of medicine. They took in too much territory and claimed all medicine as their own and pushed the doctors into the background. The care of the sick was sanctified and constituted or contributed to the glory of the Church. The interest of the patient as the primary object in medicine was superseded by the interest in an organization. A study of facts under these conditions was not only useless but objectionable. There ensued naturally a long row which is even today not entirely cleared up. There were some unpleasant offshoots. However when the Church pushed us aside they did not push much.

However being dumb is better than malicious ignorance. Garrison discusses the therapeutic angle: "There grew up a cult of faith healing or theurgic therapy, an implicit belief in the miraculous healing power of the saints and of holy relics. Supernatural aid came to be more and more esteemed as medical art showed itself to be powerless, particularly in times of great epidemics. Western medicine unlike that of Byzantium and Islam, went into eclipse, under the withering doctrines of the Church; and its practice, as Neuberger says, 'became as rudimentary and stereotyped as that of primitive man'." The summary compels one to note that while the Church lifted up it also pulled down. Thus we are compelled to note

that while the Church did much for us doctors it was purely a byproduct. We were tolerated only in so far as we were useful to the Church, even as today.

Baas discusses the same tendency from the point of view of the causation of disease: "Diseases were generally regarded as a chastisement from God or a visitation of the devil. Severe acute diseases were generally held to be the result of poison; pestilences as effect of poisoning of the springs, atmospheric conditions and influences," and of course sin. In the last they were getting pretty near the truth, but they were not specific enough to make the information useful.

"The result was inevitable, faith came before works medically as well as ecclesiastically. If there was faith enough, naturally the doctors were not needed. The corollary would seem to be if everybody had faith enough no one need die, or even suffer. That doctrine is still paying dividends a hundred cents *on the dime*." Pagel did not approve of this state of affairs as may be judged from the picture he drew: "Under such circumstances, it is perfectly apparent that one can not even think of any such thing as scientific progress. Philosophic dialecticism blossomed, while pestilences stunk to high heaven, and as the priests raved, the people died in crowds. The sickening miasma rose higher than all the prayers, higher even than the very tips of the highest church steeples."

It may be of general interest to record some of the difficulties which the doctors had to meet. The clergy was the only class who could lay any claim to education. The Church taught faith, prayers and fasting were better than the doctor's amulets. That is likely an overstatement. If they had said as good as, there would be no complaint. No one cipher can claim greater dignity than another, size in ciphers does not alter its numeric value.

There came a sad chapter. The Church "edicted" the monks from practicing medicine. Why this was done is difficult to understand. The monks were centuries ahead of their time in human altruism. This likely was the cause of their oppression. One is reminded of the reasons Zeus gave for eliminating Aesculapius, he was stealing the show. The terms of the edict were so broad that the whole medical profession along with the monks was rendered impotent. Such recorded events make it clear what stopped our progress. Why a brighter light, as seen by the labors of the monks, the establishment of hospitals, budding altruism, was not completely extinguished, is not explained. Some nobler influence was active, whence it came leaves us free to imagine that perhaps pantheism in its widest sense was active after all. Did the Eternal stars tell those monks that all men were their brothers? How else can one explain it? If the stars did not tell them, they just had a hunch—got it out of their own heads. The important thing is that 'way back yonder in the Dark Ages monk and doctor were brothers in the labors for the good of their fellow humans. What was gained by crushing that fine start? What would have been the influence on the course of history if he had been allowed to keep the monks and ditched the clergy?

The result of the restrictions placed on the monks had a very significant result: the hospitals went out of their hands and were taken over by municipalities. I parenthetically note that we are seeing the same tendency now. One need only mention a few: Hotel Dieu, Paris 641; St. Albans in England 826 A.D. Walsh states that there were four city hospitals in Rome in the eleventh century. Virchow catalogues 155 of these hospitals in Germany alone. One wonders if there is something significant here of universal application: When churches fail, municipalities take

over. Are men who make up the "municipalities" made up of men outside the church or are they church members who go outside the church to save the wreck? Here is the significant thing that when the church fails there are noble men to take over.

Sometimes events stimulate movements outside of noble aspirations. Self protection may supplement altruism, and even supplant it. For instance hospitals multiplied tremendously with the outbreak of leprosy. Special hospitals were built for them. They were called leper hospitals, 200 of them in Paris alone, 19,000 in Europe. Billings suggests that the givers to hospitals gave more for their own benefit than for the good of the receivers. In other words when people are scared they are anxious to build isolation hospitals to keep the sick away from themselves. When scared, call the doctor and have him build isolation hospitals. If he catches the disease, no loss.

Let us take a look into the future for purposes of contrast. Syphilis was only slightly less frightful than leprosy. There was something the sin specialists could have fixed on as illustrative cases but they flunked it and ascribed it to astrological influence, including the moon. That was not an attempt at punning, they actually believed it. Now we know it was so. It required the concrete statement by our own dynamic Surgeon General Parran who explains that astral influences are only accessory factors before something or other as the lawyers say. He not only insists on talking out in public what causes, but what to do about it. What is more, he insists that it be done. It is thrilling to see what one man can do when he sees a spade, and insists that spades are made to dig up weeds with. That is medicine at its best. Find out, then do something, whether the public likes it or not. It was never more obvious than now that sin has a much more active market than virtue.

Doctors had a lot of troubles thrust on them. How really constricting these restrictions were is to be found in the code of Hammurabi. Under this code before beginning treatment the doctor was compelled to make a contract that if the patient died the doctor got no fee. In lieu thereof he got his hands cut off. If the patient recovered he was paid ten shekels of silver.

The code of Hammurabi deserves more than a passing mention. In 1901 De Morgan discovered a big stone on which was written the code. It concerns chiefly civil laws and had but little to say about religion, neither that nor moral conduct. He lived 1000 years before Moses but the clergy cite them as proof of the inspirational origin of the Mosaic laws. Inspiration nothing, he just wrote down those parts which fitted in with the low moral state of what one writer says was "the semisavage Jews." That is no reflection. We figure people on what they are, not, from whence they started.

In that old day they were really rough. If the patient died the doctor was turned over to the relatives and they had the power to do with him what they pleased, e.g., cut off his hands as noted above. Sometimes it was worse, if he did not change location in time. That they really did get tough is evidenced by the fact that two physicians who treated a king's wife for the plague were executed on her grave because she had died despite their treatment. Sometimes they just took the doctor's property, a sort of forerunner of the modern malpractice suit which not only takes his prosperity but also his reputation.

Aside from questions of professional ability the doctor evidently did not stand very high in the community as is made evident by the fact that he was forbidden to bleed a married woman except in the presence of her relatives. "Bleeding" it must be ex-

plained, in that day meant the abstraction of blood from a vein and had no financial connotation. It was feared that the doctor might take privileges. One wonders; single ladies were not mentioned, meaning of course concubines. They, neither doctor nor lady, had any way of knowing if they were maiden or married. Single, married or neutral, no prudent doctor today will even say "good morning" to a lady patient except in the presence of at least one nurse and the janitor. Of course in taking this precaution he is only flattering himself. Generally speaking the shape of doctors' faces is a sufficient protection of the lady's honor and his own reputation.

Just why doctors were even tolerated by Hammurabi one cannot understand. There was no evidence that the doctor was of any use and ever earned the ten shekels of silver. If the patient recovered it was certainly coincidental. There is no record of any simultaneously praying for recovery. That was fortunate for in that event in case of recovery there would have been a dispute as to who was to get the credit or the ten shekels of silver, as it was in the time of my beginning practice.

How helpless the doctors were is shown in probably the worst epidemic of all time, the Black death, in 1348, in which fifteen million people died, which constituted a fourth of the population of the then known world. This epidemic was remarkable for its wide range rather than the high mortality rate. Many other epidemics are recorded in which a fourth of the population perished but the disease was less widely spread. It made no difference it may be noted whether the doctor arrived in time or not. Cases are related in which the physician was buried in the same grave with his patient or shared his funeral pyre having in those instances died spontaneously. Obviously this il-

lustrates the possibility of the doctor arriving too soon, in fact he arrived hundreds of years too soon.

It may be noted parenthetically that these diseases even today have no remedy. Our freedom from such epidemics is due to sanitation. This effective sanitation is made possible by the discovery of first causes, bacteria. It was only after bacteria were discovered was it possible to control disease. Before this discovery the presence of the doctor was useless and he was only looking for trouble, and the disease he pretended to treat. We cannot cure the plague and like epidemics, we can only prevent them. Eliminate us doctors and those old epidemics will be back as of yore.

Useless in epidemics we may ask: Did the doctors serve any useful purpose during the Dark Ages? A little. They dressed wounds, set fractures, put salves on skin eruptions, had potions for headaches on the morning after. There was little advancement over the Egyptian medicine noted in a previous chapter. So after all Rome was not so dumb when she figured out that for 600 years they were just as well off without doctors, as above noted. If it itched they could scratch, if they had a boil it would burst in a few days and the less the doctor fooled with it, the better; if they waked up with a headache they could take another drink; if they ate too much they stuck their fingers down their gullets and then they would feel better. Thus it seems that it was not an unwarranted burden placed upon doctors when they asked us to prove that we were of any use. To prove it we had to be measured by the achievement of the many cases observed over a long period of time.

A reaction against the mysticism of the Dark Ages began with Roger Bacon, an English priest-philosopher. He was a member of the Franciscan order of monks and a teacher at Oxford. He insisted on the rejuvenation of the practice of observing the patient,

and independent thought. Naturally his contemporaries thought he was in league with the devil and though he did not mention the Church or any of its teachings he was accused of heresy and he had an unpleasant time. He only observed that the false scholasticism of the day was stifling progress. Of course progress was what everyone else wanted stifled. We have the same thing to holler about today.

The clergy sometimes got real rough with doctors who did not attend to their own business. But we can say for the clergy that so long as the doctors avoided things ecclesiastic they were ignored. If they sought real trouble they had to mix in the theological discussions.

How rough things once were is shown by what happened to one of our early colleagues, Servetus by name, one of the greatest figures in medicine. His life was notable also because he was pursued and persecuted equally by Catholics and Protestants. Being educated for the Church he got some of his teachings mixed up so on invitation of his teachers he gave up the church and devoted his entire time to medicine. That gentle hint should have told him that he had better go back and sit down.

His distinction as a medical man rests chiefly on the fact that he discovered the lesser circulation of the blood, therefore he must stand beside Harvey in the annals of science. His scientific work did not bring about his troubles. Nobody cared how their lungs got their blood so long as their vocal powers as dispensers of ecclesiastical knowledge were unimpaired. He made his great mistake when he opposed infant baptism. He stated that the newborn did not know much and to baptize them in infancy was pure horse-play, or whatever the ecclesiastic term for such acts may be. Just what baptism has to do with the wel-

fare of the human race in general or the lesser circulation in particular has not yet been determined. The first subject to be investigated is whether it makes any difference.

But I am going to do the same thing by dragging out of oblivion the fact that really these were not the major causes for exterminating Servetus. At that time Luther was seven years dead and it seemed the reform he instigated was about to fail. Something had to be done. Calvin was the only person of importance left to carry on the reform. It was up to him to do something startling in order to boost his own prestige and the failing cause. He did startle everybody by starting two things, a fire and the unending hate of all doctors.

Rome tried Servetus because it did not like his talk and it looked bad for the young doctor so he escaped to Geneva in order to be under the divine protection of the great reformer, Calvin. In this case the gag of escaping from the frying pan into the fire was no figure of speech. After a long trial, seven years in fact, Servetus was condemned to the stake to show that the reformers were just as potent in the suppression of heretics as the Mother Church. Thus it comes to light as one might have suspected, that politics was at the bottom of the controversy as it is in most church wrangles. Servetus was burned, slowly. As the flames crept up Servetus repeated the word "Jesus" six times; Jesus being a total stranger to Calvin his pleadings got him no redress.

All medical men should reflect with pride that in his agony Servetus showed a faith in Jesus but did not express any condemnation for his persecutors. His faith was in Jesus, it was the followers of Christ of Paul that persecuted him. He was a true doctor at heart.

I have drawn out this account of Servetus' fate for a very definite reason. If anyone feels any urge to burn up any doctor for what he has said, or written, he should ponder over Calvin's ultimate fate; Dean Swift noted that Calvin mistook spite and hate for zeal. After the death of Servetus, believe it or not, Calvin was worried. It is related that he was very sick, spit up much blood, blood supplied by the lesser circulation Servetus discovered, and suffered from intense headaches. And on top of all this he developed rheumatic fever and gout. All the solace he had was his capacity to kill in response to his religious zeal. The God of science caught up with him. Here is how: Instead of patting himself on the back for exterminating Servetus he worried. That disturbed his digestion, hence gout. It was not the God of Moses who punished him but the God of science. The moral of course is: "Don't let the cussedness you do disturb your digestion,"—illustration—a couple of dictators just hanging on.

But we doctors must not allow the lesson of Servetus to escape us. He made his big mistake when he talked. Only rarely does a doctor talk too much. There is no penalty for merely thinking, or even finding out something. There was a way of pursuing scientific studies with impunity, even in that day, if one pursued his work in silence and kept the results hidden. Gregor Mendel showed how it could be done. He was a priest of a small parish. He had a garden and in this little plat of ground he conducted experiments in heredity which resulted in a theory of heredity which has stood the test of time without amendment down to the present day. He worked with peas, little plants easily hidden by rosebushes, from the prying eyes of his ecclesiastical superiors. His works stand as the ideal example of how a research could be conducted, check and recheck, seeking always for pos-

sible sources of error. He wrote down his results and let it go at that. He took the additional precaution of being dead sixty years before his theory was published and even then it went unnoticed except by scientists. This leads one to the conclusion that it is not so much what we do so long as we do not brag about it. One may think he died without getting any credit for his labors. That is all wrong. He did a good piece of work which he knew would live from now on, and in that he was assured immortality. The God of science said to him that he was a nice boy.

One may ponder that if Galileo had done his work, written his results and allowed them to lie dormant a couple of hundred years, say until the time of Simon Newcomb, he might have escaped some very unpleasant experiences and might have achieved sainthood. On second thought it is apparent that had he done so there would not have been any Newcomb.

This is a good place to show that the spirit that burned Servetus is not dead. In the surgeon's scrub room in some hospitals one sees before him rules established by the clergy telling the surgeon what he may not do. The rules there presented breathe the note of the darkest days of the Dark Ages. Nothing must be done that could by the most extravagant play of the imagination be a bar to a future pregnancy. Whether it is a question of the life of the patient makes not a particle of difference. Even an unruptured pregnancy in a tube must not be removed. The mere fact that no such pregnancy has ever resulted in a living child, but on the other hand many women have died when not subjected to a timely operation makes not a particle of difference. Why such things can exist is a puzzle. The clergy declare thereby that they are of a higher, something or other, certainly not religion, than we surgeons. Furthermore they de-

clare than an ecclesiastical delusion is more important than the lives of our patients. To allow patients to die which we doctors could save except for these prohibitions surpasses understanding, except as they make clear to us just what is back of them. It is necessary to adhere to the old teaching, even though it is obviously useless, just now like praying for peace. God forgive them, they know not what they do. Dark Ages to date.

We doctors have a just grouch. Why was truth so persistently opposed, what was gained by that puzzles us still. We doctors are still opposed though it be small, just a toehold on the past but it is still present. Just enough to insult us doctors and tell us what is really the motivating force. One wonders why it is that a surgeon today can remove the entire thyroid gland and the clergy pay no attention. God sure put it there and therefore it should not be fooled with, even though it becomes unruly and kills the patient. The mere fact that the patient is cured and likes it should have nothing to do with mitigating the heinousness of the crime.

To come right down to date when Banting controlled diabetes. Why was it not flying in the face of Providence to control diabetes when that was a just punishment for overeating. Just possibly because there are so many overfed members of the cloth.

It seems worth while to take a backward look to discover if we can why we are held back before we proceed to discuss the Renaissance in medicine. As above noted this is necessary because history of the Dark Ages is the small squeak of reality today so far as we doctors are concerned. It is vastly more important in the limitation of the moral and spiritual development of the world.

V

In order to find our place in the period of the Dark Ages it seems of interest to try to fit ourselves in the wider range of human history. This will be useful when we come to add up in a subsequent chapter the achievements of us doctors as we are today. It may not allow a return of blood pressure to normal but we must review the past. The humanitarian impulses of monks were suppressed, apparently without reason. This helps us to evaluate ourselves. The monks were all right ecclesiastically we may assume, but they were slapped on the wrist when they established hospitals. The only factor common to both of us apparently was that the Church was scared we would steal the show. A bigger scare is in the offing. All we doctors have to do is to keep our eye on the spirit of the monks, the desire to help mankind, and add to our science as much as we can.

Scientists feel that the great laws of nature are an expression of a God who made the laws which worked themselves out in development of science as we know it. Perhaps the savages who saw God in all animals and all plants, even in rocks, weren't so far off. It is here worth noting that Pasteur in his study of crystals saw a manifestation of God's action and crystals were formed eons of time before Moses' account of Genesis. One must conclude that if one has a mind capable of seeing a God he will find one. It will differ from the God of Moses just as his mind differs from that of Moses. Surely that obvious statement should not make anyone mad.

I bring this up in order to ask a very pertinent question. The church had an awful time suppressing the sciences of astronomy and paleontology. Why does the church, all of them, persist in keeping us in the penumbra of the Dark Ages? Only two per cent of

our wounded soldiers die; of infectious diseases there are none, except those made possible by any bright child who has read Proverbs Chap. VII. Sixty per cent of the wounded in the Civil War died, death from diseases now prevented outnumbered two to one those who died from wounds. Suppose those gitures obtained today!

If the public would pay more attention to morals we will look after the control of disease and stand off eternal bliss as long as possible. Our soldier boys appreciate the value of the doctors by their side. After they have caught up with the liberty they are pursuing they will bring enough of it back to free us doctors from the Dark Ages. This is the answer to the question raised previously: Are we doctors of any use? When will the time come when the clergy will recognize us as their equals morally, as we are obviously in the service of mankind? I boldly add a word of warning: Let the Bombastic Blusterers heed this date. In A.D. 1882 when Koch demonstrated the bacterial causation of diseases the Dark Ages for us doctors ceased.

CHAPTER XIII

MEDICINE IN THE RENAISSANCE

We may start this chapter with the statement that the noblest achievements of the world have been the products of individual effort. No other chapter in medical history illustrates so well the fact that men isolated and alone push forward truths even though they be hindered and oppressed, even suppressed. They have demonstrated that the only rocks on which achievement can be builded are the laws of the God of nature. The individual may be a member of some exalted organization, or of a local checker club. It all depends on the man. The activating stimulus of the man is something beyond himself. We call it spirit which is just another word for something, we do not know what. What it is that works within a man which urges him to achievement nobody knows but it is a tune played on his own instrument. It is something that cannot be dominated by authority.

In the previous chapter I discussed medicine in the Dark Ages. It was dark because we had no light. Scientists did nothing for which they need look back with regret. When we abandoned mythology to the clergy we had nothing. That was true all through the dark ages of civilization, but we did not pretend to have what we did not have. To be ignorant is unfortunate but it leaves a clear slate that beckons us to write something thereon.

In the previous chapter I showed how Galen froze medical advancement for a thousand years. It was easy to so fix it because everybody was under the spell of authority. There is a stage among all peoples when they look to authority because they have known no other state, hence they are satisfied. It was only when individual men became restless and sought the truth as Hippocrates had done that there was

advancement. Nobody paid any attention to him, there was yet no authority to be frightened by advancement, none to suppress him.

The Renaissance has been described as that period in which there was a transition of medieval to modern history. Historians define a definite period in history. Such a period can be written in books but to place it in the record of events is not so easy. For my purpose it includes that period when both the church and medieval medicine were compelled to loosen their dominating hold on progress and despite their restraining influence the still small voice in the human conscience began to speak in a language which could not be ignored. It was during this period when science in general and that of medicine in particular began to pipe up here and there like voices of birds in the springtime.

On the literary side the Renaissance was marked by a revival of letters, the overthrow of scholasticism, of feudalism, and of all except the secular domination of the church. In literature in England it was marked by the Elizabethan period made notable by Shakespeare, Spencer, and Francis Bacon. On the scientific side we begin with Bruno, Servetus burned, Galileo persecuted and many crushed but the light appeared as we saw when Harvey was honored in his old age and Lister knighted. Pasteur, Koch, Behring, Lazear, Banting, and thousands of others demonstrated that it is possible for man to achieve immortality. It was the spirit in the conscience of individual men that demonstrated honest work never dies.

I

The Renaissance for scientists begins in an indefinite period when it became physically safe to pursue the investigation of truth. We are no longer threatened by the stake, our written records are no longer burned

in the street, the spirit of science is free. We are yet in a period when we are annoyed by the barking dogs at our heels. It is annoying but we know it is just a matter of coloring, the color being yellow; they were born that way.

We are still in a period in which any person who devotes all he has to the solution of a problem must realize at the outset that should he succeed most likely he may still be pursued by the barks of the envious even among his own colleagues. This is the only resort of those whose minds are stationary, envious, hateful. Thus it came about that many were crushed, like Semmelweis, by the sense of failure because he was condemned by those in authority. They said he was crazy, and he died insane. It was the handiwork of the envious. Those who should have gladly hailed the control of childbed fever made their diagnosis come true. Yet his spirit goes marching on, singing a new word of praise as each newborn child emits its wail when it first feels the chill of the atmosphere of its new environment. A few lived to see themselves vindicated. If we must view sad events it is pleasant to speak of them in the past tense, but the things happen now and they go unnoticed. We crucified Mitchell and have Lindbergh safely encased in the prison of oblivion as truly as Servetus was within walls for seven years. But the spirit of Servetus was not consumed and still lives, we can see already that Mitchell and Lindbergh spoke the truth, and it is only stupidity stimulated by envy, faith and lassitude which prevents us from proclaiming it. Now we are acknowledging the truth by frantically building airplanes to save us from destruction by savages. Mitchell still lives in spirit and every time a bomber zooms overhead, who can help taking off his hat and reverently saying "There flies the spirit of Mitch-

ell." Sure some time we will erect marble shafts in grateful memory but it will be by a new generation.

This prelude prepares us to see human inhibitions which trails those who advance too far ahead of the common herd. In this period we shall see how the discovery of little pebbles of truth ultimately resulted in the building of the science of medicine as we know it today.

II

Medicine became scientific in so far as facts are facts capable of being compared with other facts. True, the facts with which doctors dealt in that early day had to do with the manifestations of disease in each individual and how diseased organs looked after the patient died. If he did not die we could only infer by comparing him with those who did die and assuming that he got well of what others died. It was possible to deal only with isolated facts. It is only in the discovery of fundamental facts that medicine really progressed. Therefore I carry this period down to the discovery of bacteria as the cause of disease when medicine became an exact science so that the medical investigators became worthy to sit in the seat with the astronomer, the mathematician, the chemist and the physicist. That joyous period rates a chapter all its own.

Viewed in retrospect we can trace the development of medicine step by step as fact was added to fact. But when the minuter history is studied we learn that many missteps were made. The scientists basking in the moon, like the lover, step on what appears to be a solid rock, discover it was just a mixture of moon rays and water, and an exaggerated hope.

Before fundamental principles were born scientific advancement depended on detached facts which were proved, or old ones which were wrong, but even if

wrong they often served as stepping stones for more exact development. The correlation of facts more or less proven and making reasonable deductions therefrom is science. Subsequent events might prove the observation incomplete or even wrong yet the procedure of the investigators was according to the laws of logic of science. Franklin Mall once said, somewhat facetiously of this type of scientific work that if it stood up for 40 years it was a good piece of investigation. It proved that there was a near truth in it useful as a starting point for more exact truth, as for instance antiseptic surgery of Lister gave way in turn to the aseptic surgery of Schimmelbusch. No matter how great the discovery and how solid the rock on which it is builded the surface may need repolishing as new abrasives are discovered. The simple sterilizer of the dawn of aseptic surgery gradually was replaced by the magnificent apparatus seen in every operating room today as engineers come to the aid of us doctors.

Nowadays the importance of the individual is obscured by the universities and research institutions. Thus it is that nowadays new facts come chiefly from universities and research institutions when everything required to further the work is at hand. In this way they deserve the glory because they furnish facilities for the germinating idea in some individuals. Glory? Who can add to the satisfaction of him who knows he has set forth a new truth which will add to the benefit of mankind. Furthermore science has become so complicated that research has gone beyond the possibilities of any one man. Now experts in various branches collaborate with others each casting the light of his own abilities on the problem at hand. Unity of effort to scientists has become to research what the clinic is to the family doctor. Yet much as universities do for science there is one thing they

cannot do, they cannot create a new idea, that is born only in the individual and fortunate is the university that finds a man with an idea which they help to nurture and thus rightfully may share the glory.

Many great truths arose in individuals in obscure places. They got an idea and developed it in the silence of their own cubbyhole. Virchow in the plains of Poland, Koch in his wife's kitchen, Pasteur in an obscure private laboratory, Banting in the home of a country doctor. That they lived in a new period is evidenced by the fact that they were not imprisoned but were brought to universities and encouraged in their work. Virchow Institute, Koch Institute, Pasteur Institute bear evidence. Banting? Brick and stone cannot add to his glory.

These few irrelevant remarks may serve to make clear medicine in the act of emergence from the Dark Ages. The struggles in the period of new birth points to the relation of this period to the exalted state of medicine today as it operates under general laws, advancing step by step by individuals.

III

Since the progress of medicine during the Renaissance was marked by the work of individuals we can record progress best by discussing their work as individual investigators. They planted in obscurity the twiglets to see if they would grow. We will omit the numerous missteps investigators made in the procession. The mud puddles investigators stepped into would make a history of its own, partly amusing, partly tragic.

We may begin with anatomy of the human body. Through endless time dissection of the sacred human body was forbidden. It was all right to burn them but they were too scared to allow anyone to look and see how they were made up. Therefore the Renais-

sance receives its earliest mark, the beginning of dissection of the human body.

The study of human anatomy begins with Vesalius who was to medicine what Shakespeare was to letters. Vesalius' work was regarded as sacrilegious of course, not by the clergy alone, please note, but by envious colleagues, because it questioned the authority of Galen and incidentally exposed their own ignorance. He not only questioned Galen but proved him wrong on no less than 200 points. To say somebody is wrong is bad enough but to prove they are wrong calls for opposition.

In spite of opposition Vesalius made of anatomy a living, working science, as it is today, the very foundation of medical education. He had the usual experience of those who venture too far in advance of their time but he received only the disapproval of the followers of Galen and as that worthy carried no political significance that was all that came of it. However he was repudiated by his teachers, and was "subjected to subterranean persecution at the instance of authority." The source of the authority may remain here unnamed. That is, the envious went to the authorities who made it impossible for him to secure bodies to dissect. We see this same spirit when people with nothing to do to excite authorities to prevent experiments on animals.

The result was Vesalius could get no material to enable him to continue his studies. This broke his heart or he got mad, in modern parlance, so mad in fact that he burned all his manuscripts, and got married. After his marriage he started for Jerusalem; the association of these two events is obscure. While on this journey he received a call to his old professorship where he could again study his beloved science. Why this magnanimous gesture on the part

of the university is not recorded. He said his highest wish was "once more to be able to study that truth, as we conceive it, of the human body and of the nature of man." His wish was not to be realized. On his way back he died "solitary and unfriended." We are not told what came of his wife. Thus ended the life of the greatest man in medicine between Galen and Harvey. He wanted only to study the Bible of the human body! Died a martyr to science from a broken heart, something authority cannot mend. Nor can they prevent his soul from marching on, proclaiming throughout the endless years their colossal stupidity.

There is yet another anatomist whose life offers an event of interest. His name is Eustachi. He first described the tube that leads from the back of the mouth to the ear. He made a set of superb plates describing his discovery. These remained unpublished in the Papal library for one hundred and sixty-two years. Pope Clement XI was instrumental in having them brought forth and printed. In the publication of those plates Eustachi experienced a spiritual resurrection for if he had taken his tubes with him we could not hear a sound.

Unfortunately on the practical side of medicine during this period there is nothing credible that can be cited for the doctors. That they were not a nice lot can best be shown by quoting from Garrison: "The unclassed horde of wantering cataract couchers, lithotomists, herniotomists, and tooth-surgeons generally were, in the words of William Clowes no better than runagates or vagabonds—shameless in countenance, lewd in disposition, brutish in judgment and understanding," so disreputable in fact were they that special laws had to be passed to make the status of competent surgeons reputable—notably the edict of

Charles V in 1548, which had to be renewed by Rudolph II in 1577. If there were no legitimate practitioners, there should be no counterfeiters.

The state of the surgeons of that day was not enviable. They were barber surgeons who shaved criminals condemned to death or dressed the wounds of those tortured on the rack. Nothing like having the executed look nice for likely they were assured entrance into the pearly gates, just as they are today.

Evidently they were not a nice lot. An English surgeon said surgery was practiced by "tinkers, tooth-drawers, peddlers, hostlers, carters, porters, horse-gelders and horse-leeches, idiots, apple-squires, broom-men, bawds, witches, conjurers, sooth-sayers and sow-gelders, rogues, ratcatchers, runagates and proctors of Spittle-houses." Though he does not make further comment we may assume that otherwise they were all right.

Another class of imposters were the tramps of the period, who in spite of Henry VIII's statute against "sturdy and valiant beggars," tried to impose upon the charity of the hospitals, which gave temporary shelters to all the poor. They are still with us and impose on the charity of the charitable.

Really that is not a nice picture but a large part of the guilt must rest on those who harassed those who sought truth as we saw in the case of Vesalius. It is remarkable how events designed to produce advancement are suppressed while all sorts of human cussedness is tolerated. If one could determine the cause of dereliction of the many it would be a great contribution to society. To one familiar with the breeding technic of stockmen it would seem that fundamentally the right to reproduce in humans should be dependent somewhat on what it is they propose to reproduce. But the sacrifice of the indi-

vidual for the good of the race has only penetrated into society except as it applies to our soldier boys. They are asked not only to surrender their pleasures but their lives for the good of the stupid. Just how we are to classify those who made this sacrifice necessary is a matter of the future.

These apparently irrelevant remarks explain why the human body in the raw was sacred even down to just preceding my student days. This is not ancient history but was operative clear down to yesterday. Our professors related how it was necessary for them in their student days to "lift" bodies from some remote cemetery because there was no other means of securing material for anatomical study. This applied chiefly to the small privately owned medical school, so-called. In large universities situated in cities where the friendless deceased were numerous this did not hold. The college dissecting rooms were supplied by the potter's field. In fact in my anatomy days I sat on a committee appointed to secure the change of the word *may* to *must* in the laws of a certain state on the question of turning unclaimed bodies to the medical schools. So it gradually came about that anatomic material is now legally available.

Parellel with the sacredness of the human body for purposes of anatomical study, it is only in very recent years since autopsies have been generally permitted. In fact just about all obstructionists to medical progress have been eliminated, just a few remaining as keepsakes or something in order to maintain the dignity of those who in days gone by emulated the barmy papa.

The greatest name in the period under discussion comes next under consideration. It was noted at the beginning that the ill-fated Servetus had discovered the lesser circulation, that is the blood supply of the lungs. The blood goes from the heart through the

lungs and then back to the heart. It remained for William Harvey to demonstrate this fact, for the entire body. The circulation of course consists in that the heart pumps the blood into the arteries and when it reaches as far as it is going it travels to the veins and then by the veins goes back to the heart again only to do the same thing over until it quits for good. Harvey was an Englishman but studied in Padua because that was the leading medical center of the day and does not imply any reflection on his native England.

His work on the study of the circulation stands out as one of the best planned and the most carefully executed studies in the history of scientific research. This is because he did experiments to prove that his theory was right, thus going a step further in scientific study than did Servetus in his study of the lesser circulation. A science of facts is a definite kind of science. There may be a science of mythology which finds its culmination in the higher criticism, which finds its fruition in trying to prove things wrong which never were. I apologize for mentioning this but it is necessary to show just wherein the importance of Harvey's method lay. He avoided the clergy and worked on dogs. There were no antivivisectionists in those days to compel a revisal.

It is related that when Harvey published the results of his work his practice fell off markedly due of course to the efforts of the regular concourse of detractors who employed the usual means of covering up the fact that they did not know what Harvey was talking about. But he lived all that down and became a friend to all from the highest to the lowest. It was thought remarkable but generally admitted that though manifestly short on piety he died, as he had lived, a Christian gentleman, tenderly solicitous of all those who lived after him. More than that,

he died as a true scientist should die, he had done his best and was satisfied.

IV

Practical medicine in this early period was at a very low ebb. Having no definite knowledge of how humans looked under the skin and no knowledge whatever of what the organs showed when they are diseased, nothing more could be expected. With the impossibility of determining the nature of the disease during life or checking after death there was unlimited range for the profession to talk with conviction. In fact we also had nothing but talk as an excuse for living.

Gradually out of the dark here and there men appeared who contributed to the cause of medicine either in diagnosis or treatment. Hippocrates had been the first as we have seen. He just looked at his patient and asked him where it hurt and watched the disease develop in so far as it could be read from the actions of the patient. Of course he did not diagnose gall stone colic because he did not even know how the human liver looked and never heard of a gall stone.

We may begin with one of the most interesting characters in medical history before the age of anatomy and pathology. His name was Bombastus von Hohenheim, born 1493 near Zurich, Switzerland. Not satisfied with the simple Teutonic name he got at birth, he renamed himself Paracelsus. It will be noted that *para* means beyond and *Celsus* was the name of one of the greatest men in medical history, thus indicating that he believed himself to be an article who or which had gone beyond his famous predecessor. This gave evidence to the fact that he did not suffer from a congenital inferiority complex. He knew no Latin, therefore to him the use of a dead language was silly so he favored the use of his na-

tive German. His talks were humorous sallies directed toward those who disagreed with him. His arguments drifted "from the obscure to the incomprehensible" but he succeeded in out-talking the clergy because he was a practical sort of person. The large fees he charged, and collected, excited the envy of those in authority and so he discreetly moved.

But he was more than just a bombast. He introduced chemicals into therapeutics. He gave patients something to take and then stayed around to see the results, if any. I got my idea of how prayer should be checked from him. Unless one follows some such plan one's talk may represent just a wish and have no relation to fact.

But Paracelsus did more. He opposed Galen but instead of proving that worthy wrong as Vesalius did, he burned his books in the street as ocular evidence of his disapproval. He opposed witchcraft and condemned the strolling mountebanks who operated on people. He taught that nature heals a wound and not the fool things doctors did to them. This is evidence that he did have a sense of proportion, possibly of humor.

It was noted in the first paragraphs of this chapter that the studies in anatomy of Vesalius were the foundations of surgery. We see the fruition of his work in one of his pupils, Pare. This Pare became one of the most notable surgeons of all time. He was too poor to go to school so he just had to use his brain. He became apprenticed to a barber in Paris just to get a start, even if it was lowly. So brilliant was he that at 19 years of age he was made an army surgeon. After his army campaign he became prosector to Sylvius and made good use of this opportunity to learn anatomy. Besides being a good anatomist and a surgical genius he is said to have had a pleasing personality, a very unusual combination for a surgeon.

He must have had all these merits because it is said he enjoyed the esteem of kings, colleagues and the populace. Of course the real wise boys regarded him as an ignorant upstart because he knew no Latin and was therefore obliged to talk French. So he had his writings translated into Latin so that the educated could understand him. But it turned out, as might have been expected, they got his words but missed his ideas. Remarkable it is that while he approached everything with a free mind and accepted absolutely nothing on the simple basis that it was the approved dogma, no matter who advanced the dogma, yet he died spontaneously of old age. The reason for this good fortune is that he was the personal physician to royalty. How well this worked to his advantage is obvious because in the unpleasant event of St. Bartholomew's massacre he was the only Huguenot whose life was spared. The king still needed a good doctor as his personal physician. The king's self interest was held above the dictates of the Church, most remarkable indeed but when anyone acquires a sizeable pain he wants relief. When pain is personal, faith must wait until the doctor relieves the pain.

Pare's contribution to surgery was vast. Before him, wounds were treated by pouring them full of boiling oil and hemorrhage was controlled by searing the wounds with hot irons. One day having no hot oil he treated the wounds by a simple dressing. To his astonishment they did better than those treated with hot oil. This led to the famous aphorism "I dress the wounds, God heads them," a conclusion every surgeon reaches sooner or later. It is fortunate for posterity that he gave expression in words to the obvious. Even the obvious becomes more so when a great authority points them out, something like "a straight line is the shortest distance between two points." There is hardly a field in surgery that he

did not influence for good but these are too technical to be of general interest.

After Paracelsus, other skillful practitioners appeared. One of the most notable was Boerhaave, born in Holland. He became so renowned in the practice of his art that it is said that a letter addressed to "The Greatest Physician in Europe" would have found its way to his door. He was the reincarnation of Hippocrates. He revived bedside observation. He sat down at the patient's bedside and asked him what he complained of, just like Hippocrates did. When the patient had a chance to tell that, he felt better. The willingness to listen to the patient's tale of woe formed the basis of Boerhaave's great reputation. While the patient was telling it to the doctor that worthy was making a calculation of how much of it was true, but did not tell the patient his version, the second cause for his reputation. Then he felt the patient's pulse. After that the patient believed everything he was told.

But the patient was given medicine and the doctor came around from time to time to see how it worked in order to be on hand to receive the credit should any improvement have taken place in the meantime. But he found out a lot of things by the daily perusal of this method. His practice grew so that others, seeing the success of his method tried to imitate him and there resulted a school, meaning that a bunch of them tried to perpetuate the plan of procedure. Here it may be noted that it is the younger men who study the successful man and try to imitate him but older men his contemporaries brand him a pretender, a quack or mentally queer. Lest the layman miss the point I will explain that the young men get into the old man's boat so that when the old man falls out they will have the boat. This general plan is still operative even though otherwise medicine has advanced much.

Following Pare, John Hunter appeared, the first scientific surgeon in the world. In the course of his studies he built up one of the greatest museums of all time, which is still the pride of the English. Until the age of 19 he was only a rough neck boy when his brother William, already a noted anatomist, induced him to come to London and study in his laboratory. He did so and in the course of his life dissected every sort of animal he could gather from all the corners of the earth. Being so far ahead of his colleagues he was in constant turmoil answering their detractions. He should not have done that. They were only proving to the world that Hunter was so much bigger than they that they could not see what was going on in his head. Time would have taken care of his reputation, which of course it did. But he got so mad one day that he died of apoplexy then and there.

It was foolish of course to get a brain hemorrhage trying to teach anyone anything. He had already written a number of books where anyone who wished to learn could read. These books had to do with inflammation and gunshot wounds, books still well worth reading. His great authority made it possible to set back the hands of time by guessing wrong. This was left so that posterity could know he was human. No one I dare say knew better than he the joys of searching for truth. The work he accomplished should be an inspiration to any medical student of any period of life.

V

Next we see the first step in preventive medicine, also the work of an Englishman quite a contrast to Hunter who had to work to achieve fame and immortality. It came about as the result of a chance observation. Cows have an eruption on their udders which resembles a very mild case of smallpox. It was

called cowpox. It was observed that sometimes milkmaids contracted this eruption. Those thus affected did not contract smallpox. The next step was to deliberately infect healthy persons with cowpox so as to prevent the development of the more serious disease. By this simple procedure did Edward Jenner make himself immortal when he discovered vaccination against smallpox. He was a simple country doctor but by his work it is now possible for every person to avoid smallpox. What a terrible scourge smallpox was one can learn by study of the history of epidemic disease. Of course his English colleagues condemned his work and tried to pass laws. It seems that the only way to avoid rows in England when a new truth is discovered would be to have every English doctor discover the same truth simultaneously. After it is discovered that something new actually works there is the row as to priority. When a bunch of vultures congregate about a point one may be sure there is something dead to attract them. When a bunch of big men, this is not confined to Englishmen I hasten to say, gather about a colleague one may be sure there is something very much alive in their midst.

VI

There are many little things which to a doctor at the bedside seem so simple and matter of fact it is hard to think that they were not always done. Yet many pioneering men worked through a century or two to establish those simple procedures. Perhaps there were long controversies during the process. Many, nay most, things that have been proposed as diagnostic measures have not been proved to be of value after a fair trial. Others which served for a time have been superseded by simpler or more ef-

ficient measures. Yet they are all rungs on the ladder of progress.

Some of the things formerly done have passed out of the routine. Tongue inspection, once a standard means of diagnosis, is little regarded by the modern doctor. However in years gone by the first thing the doctor did when he approached a patient was to inspect his tongue. As a matter of fact this may give a clue as to the nature of the complaint but to read the message the tongue gives one has had to look at a large number of tongues and the young doctor today disdains knowledge that can be gained only by experience. He wants to start out along lines where he is superior at the start to the old doctor who has been educated in the school of experience. It is interesting to note that some of the older patients hark back to the old day and unless the doctor inspects the tongue they think he has slighted them.

The first thing a doctor does when he approaches the bedside in the home is to place a thermometer under the tongue of the patient. This accomplishes the double purpose of keeping that organ quiet so the doctor can think and at the same time registers his temperature. The doctor counts the pulse during this interval, notes its rate, and its character. This may come very near telling the whole story, if one has felt enough pulses in all kinds of disease. These procedures were not always done. Santorio, 1630, made a great contribution to medicine by being the first to measure the patient's temperature. In clinical parlance the doctor asks the nurse if the patient has any temperature. What he means is, does the patient have any elevation of the temperature above the normal, that is, does he have a fever. If the patient has no temperature at all he has been dead at least six hours.

The next thing the doctor does is to thump your chest. If the chest is normal there is a booming sound like beating on a loaf of dry bread. If the lung is inflamed the booming character is lost in varying degree and if the chest is full of fluid there is only the sound made by striking one's thumb with a hammer. We say the sound is flat. Louis, a French physician, first worked that out and he became expert at it so that he was able to discover tuberculosis of the lungs at its early stages, even though at that date the cause of the disease was not known. Though he taught the profession how to diagnose tuberculosis in its early stages, he did not find out how to cure the disease and died of it at an early age.

The next thing the doctor does is to take out his stethoscope, a contraption with an expanded extremity, which he places on the chest, from which two long tubes extend and which end in little knobs which he places in his ears. He listens a bit and then asks you to breathe deeply, then he asks you to say "99." This is not a mathematical test but by repeating these numbers it causes exaggeration of the noises in the chest. He hears all sorts of squeaks, if you have them, sometimes if you do not. It is a very interesting study. A squeak may hit a certain note but there may be differences in quality. A musician is able to say if a certain note is sounded on a piano or a violin, or any other instrument. We say the note has the same pitch as another but that they differ in quality. By noting this an expert can say if a lung is filled with something, just what it is filled with, a new inflammation or an old one, an inflammation or a tumor. These fine distinctions are somewhat outmoded because the modern doctor reaches at once for the x-ray plate. It is easier and takes less experience in order to get the right answer than by means of

chest examination. A young Frenchman, Laennec by name, discovered this instrument as late as 1819. One wonders how a doctor made the impression that he was earning a fee before he had this time-consuming instrument. One can even snatch a little nap while developing a reputation for great thoroughness. This can be overplayed. Once while listening at or for the fetal heart tones, I was awakened by the baby telling me he had arrived.

Next he takes a little funnel and looks into your ear to see if you haven't overlooked something in giving your history and may really have an earache or maybe he will find there the cause of your dizziness while you have been worrying about high blood pressure. Sometimes, perhaps generally, he is just looking to see if your ears need washing. When the doc says "Uh-huh" it means that you are to believe that it is as he suspected but it may mean that he sees nothing or does not understand what he sees. It is the shade of Politzer looking in. This man who first made a science of ear inspection visited Chicago only a few years ago, then a man in his eighties. That shows how recent the most of our knowledge of ear inspection is.

Next he looks into your eye. He sees the blood vessels in the back of the eye. He may say a brain tumor is causing your headache, or you may have chronic disease of the kidney, or you may have just plain hysteria. It is von Helmholtz who invented the instrument, and von Graefe who told us what we could see, if we were smart enough. A smart eye specialist is the smartest of us all. Just ask one if you doubt this statement. This is because much of his work is mathematically exact. In examining your sight he is the chemist or the physicist in his laboratory. The ability to detect errors of light refraction is

a great boon to kids not doing well in school. I speak with feeling. I was born near-sighted and if an oculist had been consulted he could have told all and sundry that I could not help it, that I really wasn't dumb.

Next the doctor, if you are a lady, covers the upper end of you, gently slides the sheet down, part way, and proceeds to feel your stomach. He knows the trouble isn't there. A horseman before throwing the saddle on an unbroken horse's back first places a hand on the neck of the animal and proceeds by stages to where he knew all the time he was going to place the saddle. It is interesting to note that in centuries gone by even this modest procedure was not permitted. You cut a little hole in the sheet and stuck a finger in. It was of course a poor substitute for a free examination by all the fingers. The joke is it was employed during the years when the ladies were so modest the gay boys had to employ secretaries to keep track of all their lady friends. I have wondered if the patient was just sparing the modesty of the doctor, or paying him a compliment. It really is not so simple.

In many cases while one has felt carefully all over, and has had his colleague feel, has had x-rays taken and all that, if you see your name on the operative list marked "exploration" you know the whole gang is going to take a look over the surgeon's shoulder to see if any of them was right in the diagnosis. But that is better for the patient than to have the surgeon say he knows when he doesn't and is not smart enough to know that he doesn't. This is better than taking everything out that comes within range of his technical skill, usually limited to the removal of the appendix and an ovary. Be this as it may, the ladies are sensible or believe we are. They don't mind if we put all four fingers on their stom-

achs. They believe the doctor has his mind on trying to find out what is wrong with her. By just this simple examination we can tell if you have a tumor, or if you have peritonitis. If you have peritonitis the muscles are rigid over the place where the inflammation is and you let out a squawk of pain. We don't ask, does it hurt? We just listen. A Frenchman by the name of Broussais first taught us the fundamental facts of the pathology of the peritoneum.

Next the dermatologist, the skin specialist, takes a look; he can tell if you have the itch, bedbugs, chiggers or disease of the suprarenal capsule or have discovered the gentle art of sinning, or perhaps the dereliction may be only a wrong diet, or too much of it. Hebra started us out on the line of study which enables us to tell a lot more than the patient wants to hear. Dermatologists have made tremendous strides in both diagnosis and treatment. An old classification divided skin diseases into three groups, those arsenic would cure, those that sulphur would cure and finally those nobody could cure. The most of them belonged to the last named group. One of the greatest boons to the treatment of diseases of the skin is the x-ray.

It would be wrong to omit the neurologists. These nerve specialists are about the most useful, leastwise the most used of the members of a clinic. They treat patients ranging from brain tumor to one having a chronic peeve at papa or some incipient puppy love. Dorothy Dix is our most useful neurologist in this latter group. She writes to them; if she had to tell it to them, that would be different.

Scientific neurology began with Charcot. In former days the mentally sick were regarded as possessed and were chained or imprisoned. Neurologists figured it out that patients were mentally sick and that it was quite as honorable to go crazy as it was to acquire

gout or cirrhosis of the liver. Many people still have a reluctance to sending members of their families to nerve hospitals.

Neurologists have separated those cases in which there are no tissue changes we can find and are consequently called functional and those where tissue changes are found which are classed as organic. All these are managed with all the accoutrements a modern hospital affords. It was not always thus. Recorded in a prominent medical journal less than a hundred years ago instead of using the method of Dr. Luke, recommended that the hysterical patients be turned over, skirts lifted and a barrel stave be applied where Baalem sat. A more genteel technic was to turn the patient over and pour a pitcher of ice water down the back. One must feel a sympathy for the old doctors who used this treatment. Suppose he wallowed through four hours of mud and found that the paralysis of the young lady was due to refusal of papa to allow a date.

I have detailed in a previous volume how one can by kindness and understanding divert these patients out of their confused state. This leaves them with a kindly feeling toward their doctor and leaves him in a position to render them further service which they will most certainly need. The harsh method leaves them scared and too often set against their environment.

Surgery of the nervous system was not possible before the advent of aseptic surgery. Now as many liberties are taken within the cranial cavity as within the abdominal contents. This belongs more properly to the medicine of today.

You are going to miss meeting the next expert. His name is Rokitansky, the gross pathologist. He looks in after you are dead and tells the friends whether it was beer or whiskey you drunk too much

of. This pathologist was the greatest of his kind. He just preceded the development of microscopic study. His ability to tell what the microscope subsequently revealed was unexcelled.

Virchow of Berlin started the microscopic studies. Now every hospital has one or more pathologists and a lot of young ladies, who do the work. There were many discoveries in the basic sciences which followed these early studies. For many years cells were known to exist in the body but there were various notions as to how they originated. Virchow announced the law that all cells develop from other cells.

Virchow was pre-eminent in many lines besides pathology. He was one of the most eminent anthropologists of all times. He included German politics in his activities and was a member of their Reichstag many years. He was the only man in Germany who had the courage to tell the bigwigs just what they were, when they neglected the care of the down-trodden. He proudly declared that he was a Pole, not a German; that shows how well he protected his reputation by a little foresight. We must admire the courage of this mite of a man. He told them what he thought of them, right to their faces or beards, and proved it. Now deficient personages tell it to them by radio.

I have reserved until last the consideration of one who stands foremost to us Americans. I must tell the tale. During one of Professor Littens' lectures, (he was professor in Berlin) he spoke of the Great American Pathologist. He said this with such enthusiasm that I felt something funny in my backbone. He interrupted his lecture, pointed a finger at me and asked "Who is he of whom I speak?" I mentioned a few of the most prominent. Said he with a withering look, "It is Reginald Fitz. A knowledge of his life and work should be required knowledge

for every American graduate." I got busy and found it was he who first described appendicitis and pancreatitis. The last named is a task for master surgeons but appendicitis comes within the range of the average surgeon and likely has saved more lives than any other operation, albeit also a lot of needless operations. I journeyed to Boston to see for myself. I frankly told Professor Fitz how I had been reprovved for my ignorance. He was more embarrassed than I. A most modest little man, a great scientist.

VII

There are other events which changed wholly the art of medicine. Our country made one of these fundamental contributions. Two men made the discovery simultaneously, Crawford W. Long of Georgia and William Thomas Green Morton of Boston. Morton was the pupil of Jackson, professor of chemistry. Jackson suggested to Morton the possibilities of ether as an anesthetic. Wells, a dentist, had previously discovered the possibility of inhalation anesthesia by his experiments with nitrous oxide.

Morton began experiments with ether on animals and on himself. He first used ether as an anesthetic October 16, 1846. Morton tried to maintain secrecy in order to have it patented, an unprofessional thing to do. Henry J. Bigelow, a Boston surgeon, negated that by publishing the results of the experiments in November of that year. Just what excuse Bigelow had for publishing the results of the work of another is not recorded.

The inevitable happened, Jackson and Morton quarreled as to who deserved the credit. Jackson suggested the idea, Morton did the work. Silly! Credit enough to immortalize both of them but their acts also immortalized their selfishness.

Long was more modest than his Boston compatriot.

He first used ether as an anesthetic in 1842 but did not publish his results until 1849. He was smart enough to know truths once revealed stay put.

Then there was a long intersectional quarrel as to who should have prior credit, Long who first used ether in 1842, or Morton who first used it in 1846 and published it in the same year, involuntarily by Bigelow as we have seen. In medicine it may be noted priority is reckoned from the date of publication. There is no other way, otherwise when someone published a new idea anyone could raise the cry that he knew that a long time before. Long took no part in the controversy, like the true scientist he was. Morton died of apoplexy in 1868, Long died of old age.

In 1867 a monument was erected in Boston commemorating the discovery of ether. There was a controversy between the friends of Morton and Jackson as to whose name should decorate the shaft. Oliver Wendell Holmes was consulted. He suggested "Why not dedicate it to e(i)ther," and so it bears the name of neither claimant. The monument commemorates the discovery of ether, no name mentioned.

The first great step making the development of modern surgery possible was the discovery of general anesthesia as above related. The second step was the development of antisepsis by Lister and then the refinement to aseptic surgery by Schimmelbusch, a young surgeon in von Bergmann's clinic in Berlin. Lister, harking back to the researches of Pasteur, got the hunch that perhaps it was the Frenchman's little bugs which made wounds suppurate. So he did his operations in a chemical spray designed to destroy the bacteria before they got into the wounds. By this means it was demonstrated that wounds would heal by first intention, that is to say the wounds healed without the formation of pus which had been

previously regarded as a necessary step in wound healing. True to the usual national incredulity, Englishmen would have nothing to do with the new idea. One Englishman sneeringly remarked "Lister washes his hands before operating, I wash mine afterwards" but that illfated remark cannot be washed off the reputation of the man who made it.

Many Americans visited Lister's Clinics and brought the idea home with them and began its use. Some American surgeons accepted the idea, others rejected it. One Philadelphia surgeon did, the other did not, but after a time those who did not, had occasion to wish they had done it, because those who did, got all the patients because of the better results.

Germans also not handicapped by any aversion took up the idea and they too found that it worked. Furthermore they added to it. Lister used antiseptics to kill the bacteria. Schimmelbusch as above noted got the idea that if one killed all the bacteria in the environment one could do away with bactericidal drugs. Thus aseptic surgery was born. Stern fate decreed that Schimmelbusch should prick his finger during an operation and he died of the infection at the early age of thirty years. Thirty years after this untimely death whenever stern old von Bergmann mentioned the achievements of his young assistant, his eyes filled with tears. Schimmelbusch did his work in von Bergmann's clinic and the Chief was generally given credit for the work but he most vehemently gave his young assistant full credit.

The discovery of the bacterial causation of suppuration shows how sometimes fate is unjust. Billroth worked for many years on the bacterial flora of wounds and published an atlas about it. Lister just got a hunch he would spray the bacteria without bothering to discover their names. Perhaps after all it was just for Billroth did many other things to

make him immortal. Without antiseptics Lister would just have been another Scotch surgeon.

The control of childbed fever presents another battle to control infection. It has an interesting history. Infection claimed one out of every ten women in childbirth. Oliver Wendell Holmes wrote a paper in 1843 setting forth his idea as to how puerperal fever could be prevented. Holmes evolved the theory purely by a process of reasoning, one of the most brilliant achievements in scientific thinking or else he had heard about some work done somewhere. He got his reputation cheap because he got an idea and could make it interesting reading. About 1840 Semmelweis, a young Viennese obstetrician, got the idea that childbed fever was due to uncleanness and avoiding contamination of his hands by autopsy material he reduced the mother mortality from 10 to 1 per cent. Despite these obvious splendid results he was hounded by older specialists in his line after the pattern above noted. The persecution to which Semmelweis was subjected by his superiors furnishes one of the most contemptible chapters in medicine. Calvin was kinder to Servetus; being burned with fire is more humane than being consumed by calumny by those in authority, from whom one has a right to look for honest judgment.

Just think of it. Suppose the doctors today had collectively speaking had to realize that one out of every ten women would die in childbirth. More than that, in many hospitals the mortality rate rose to fifty per cent and even more. Now all that is a thing of the past. Not one has died from childbed fever in the experience of myself or any of my assistants. About the only women who die today are those who have abortions done. The tragedy of it, Semmelweis died, persecuted by his own profession, not know-

ing the incalculable service he had rendered woman-kind from now on, but his contemptible confreres could not prevent his soul from marching on.

Sir James Y. Simpson in 1847 discovered chloroform which was an anesthetic which he used in order to lessen the pain in childbirth. This idea of lessening pain in labor brought forth violent protests from the clergy. It was pointed out that God said as punishment for handing Adam the apple woman henceforth would give birth to babies in pain and tribulation. For some reason history emphasizes the fact that it was Presbyterian clergymen who made the fuss about the use of chloroform to lessen the pains of childbirth. Whether this was the occasion for the origin of the notion that babies are damned when born is not stated. The real explanation I am sure is that there was no other kind of minister in the town when Simpson practiced, so they had the field all to themselves. Simpson was indifferent to damnation so they worked their spleen on the babies.

There is another explanation. Back in that day doctors sometimes entered into theological affairs. Suppose an overworked doctor was waked up the usual hour of 1 A.M. with the information that Mrs. Jones desires to have a baby. It is but natural that he should have said in exasperation "Damn the babies." This I am sure explains everything to the credit of the clergy.

The clergy got so peeved because the doctors were acting contrary to the Scriptures that they appealed to the English Queen to suppress the doctors. That gave her an idea. The Lady investigated, it sounded good, and she took it herself to defeat the purpose of a painful childbirth.

Many great men in all ages and climes have contributed to the common welfare by applying the discoveries to the common man. Their work is chiefly

an art but without them the results of the investigators would lie dormant. Many factors enter into the making of the successful doctor. Several of the greatest I have known have lived their lives in hamlets of less than 500 population. Clinical judgment is a gift of the gods, you have it or you do not. Personality enters large, the ability to inspire confidence, but this is of value only as a start. It must be followed by real skill. Good intentions never cured anyone.

The purpose of this chapter is to show the layman how medicine advanced at first by the achievements of individual men. Opposed whenever their discoveries ran counter to the generally accepted opinions. It also shows that doing fool things is not the privilege of any one profession. Trailblazers in medicine were usually opposed by men in their own profession. This shows that if doctors spent all their time looking after their patients and less in envy of their greater colleagues they would not so often have made fools of themselves. There is just another fact that may be of use to the layman. When a doctor casts slurs against a fellow practitioner, the one criticized is recognized as a better man, and the patient better go to the one condemned, for his repairs.

Generally speaking, however, the important fact to be noted is that so long as medical progress was limited to the work of individuals working out concrete facts there was but little progress. It was only when general laws were discovered that progress became rapid and progressive. Yet these were individual achievements. General laws do not come out of a clear sky. There was much important work before Pasteur and Koch ready to be used when the general laws were discovered. A pile of brick and sacks of cement do not look inspiring but when the architect and the expert mechanic appear on the job the im-

portance of those crude materials appears imminent. Other sciences progressed in a like manner, notably physics and astronomy, interrelated, and chemistry, long independent, now united with physics in a way calculated to make one dizzy. Science "edicts" nothing, hates nothing except error.

CHAPTER XIV

THE DEVELOPMENT OF SCIENTIFIC MEDICINE

We have seen in the preceding chapters how medicine floundered during the thousand years when it was dominated by the atmosphere of authority, mostly of its own making. Gradually high lights appeared as exceptional men appeared, both in pure science, and as individual practitioners. There were no fundamental general facts known which would permit the building of a real science. This state of affairs existed some four hundred years. True there were fundamental rumblings after the microscope was invented but these were but detached observations of individuals working alone.

It was not until the development of bacteriology, an achievement of the past seventy years, that medicine became a real science. It still brings me a smile when I recall that my daughter, just beginning the study of bacteriology, remarked "Daddy, you and bacteria were discovered about the same time." Those were only coincidental events, but it is interesting because the achievements of bacteriology have taken place during the lifetime of one person yet living. It emphasizes the science of medicine is still very young.

I

In the following pages it will be possible to present only the high lights to indicate how bacteriology made possible the conquering of the scavengers of mankind, thus eliminating infectious disease, saving countless lives and making the world free for commerce.

In addition to the discovery of bacteria the rapid advance of scientific medicine rests on the development of other sciences which have been of incalculable benefit in the lessening of suffering and the curing of

disease, notably physics and chemistry. The scientific control of infectious diseases is not enough. The Department of Public Health must compel the public to accept the benefits accrued through the development of scientific medicine, whether the public likes it or not. Once the public grasps the meaning of what medicine has done for it compulsion will no longer be necessary, that is the theory.

In presenting the outline of the development of our achievements we must first note the development of bacteriology into a science. It begins with the story of the achievements of individual men which is a manifestation of the inspiration of individuals. It is only by degrees that these labors become common knowledge. It is no longer a study of isolated investigators as it was in my student days. The women in our clinical laboratories today know more bacteriology than did the entire profession fifty years ago.

Soon after the invention of the microscope men saw strange little things and came near to the discovery of their influence in etiology of diseases but a consideration of this story must be neglected because it is a long one. Many of these men had a sort of premonition which goes to show that to establish a thing as truth one must prove it.

Real science of bacteriology came with the isolation of bacteria by cultivating them on artificial media which made it possible to isolate each variety, and the reproduction of the disease in animals by injection of these pure cultures. The honor for the ground work of this achievement goes to Robert Koch. He was, when he made his epoch-making discoveries, an obscure country doctor. He had no equipment except an inspiration and a brilliant mind and unfailing industry. As a means of sterilization and incubation of his bacteria he used his wife's cookstove. It

is related that this use of the essential culinary implement often disarranged the family schedules. Like most women in such a situation Mrs. Koch just watched to see if Robert was inspired or crazy. Then as now only time can solve such domestic problems.

Koch worked first on the bacteria of tuberculosis and was able to announce the causative organism of that disease in 1886. An interesting story is told of Koch's advent into the scientific world. Having worked out the development and staining of bacteria he presented his studies to Weigert, then professor of pathology in Leipzig. His first assistant Cohnheim and a bunch of his collaborators were doing an autopsy. The Professor said: "Gentlemen, cease your labors, here is a man who is inspired." Koch demonstrated his researches to the assembled group. In the morning Koch was only an obscure country doctor, by evening he was the first great bacteriologist. It is a most dramatic story. He finished his labors in Koch Institute in Berlin, a magnificent building built by a proud nation. He really was inspired.

Unfortunately the discovery of the causative organism of tuberculosis was not followed by the discovery of a cure or preventive serum as has been true of many other infectious diseases. It made possible the early recognition of the disease which in turn taught much about the conditions under which it develops. The data thus collected has resulted in a very great reduction in the frequency of the disease.

Koch made cultures on plates and thus separated colonies from which he could retransplant. Dr. M. A. Barber, my colleague in the University of Kansas laboratory, developed a very delicate apparatus whereby he could secure a single bacterium and transfer it to a culture medium. He secured a separate pen for the organism by dropping boiling water on his fore-

arm thus producing a blister. Into this blister he introduced this single organism.

The discovery of the causative organism of diphtheria was a combined work. A number of men were engaged in the study of the organism developing in the membrane which forms in the throats of children when affected with diphtheria. The discovery of the causative organism of diphtheria ended in the discovery of a cure of the disease, and even more important, the development of a prevention of the disease. I have described elsewhere the ravages of diphtheria as it occurred in my childhood. All treatments were futile and the mortality rate in children was appalling. The discovery of a specific serum literally changed the dirge of the funeral into the song of thanksgiving, at least to those who have lived through the transition.

The honor for the discovery of the causative organism of diphtheria goes to Edwin Klebs. He found bacteria constantly present in the throats of children afflicted by diphtheria. Klebs was one of those persons who when he had demonstrated something to his own satisfaction called it a day and proceeded to other problems. He told his discoveries to other bacteriologists and left the details to be worked out by them. They did what was expected of them.

Just a word about this remarkable man. He spent a year in the Postgraduate Medical School in Chicago. It was my privilege to know him as well as a scared young doctor might be expected to know an intellectual giant. His assistant, Dr. Zeit, was my teacher. I went with him to show the Professor a slide taken from a tumor, removed from a Kansan by the way. The Professor examined the slide and handing it back to Dr. Zeit he remarked that it was not malignant. As my instructor and I were leaving the room

he called back, "Dr. Zeit, tell the doctor that if the tumor returns to let us know." I nearly had a fit. One of the greatest pathologists of the day could say with a faint smile that he was not quite certain that he was right. In his judgment it was not cancer but he might be wrong. That little lesson has remained as part of my working equipment to this very day. When I give an opinion I think of Dr. Klebs. There is a possibility that I may be wrong. I enter this detail to show how humbly the minds of great scientists work and how a chance remark may influence a young doctor.

Professor Klebs as noted above, did not care for detail. Loeffler worked with the bacilli and proved by the culture methods discovered by Koch that those bacilli of Klebs caused diphtheria. Here then was demonstrated the cause of the scourge of children. Here was solid foundation on which to build.

Behring then took up the work. By injecting bacteria of diphtheria into animals he caused a reaction in the blood of those animals which when injected into other animals prevented the development of the disease. The details of the work was done on mice and guinea pigs. Since a lot of serum would be needed, larger animals were tried. Finally the horse was selected for the development of the serum. The procedure is to inject bacteria into the blood stream of the animal until they no longer cause a toxic effect. The serum is drawn off and prepared for clinical use. To allay the sensibilities of the tender hearted I can give the assurance that the horses in the serological institutions receive all the attention the dowagers, who worry about cruelty to animals, themselves demand. The horses are well groomed, most carefully fed, and they wax plump, at times even fat. They are really the dowagers of the equine breed—well fed, nothing

to do. All they need to suffer is a prick of a fine needle, not more than two mosquito power, several times a month.

After the serum is withdrawn from the equine aristocrats it is prepared for use and placed in vials ready for the doctor to use on his patients. At first the serum was used only to cure sick children. When the serum was injected usually in 24 hours the child was better, and was inquiring as to what was delaying breakfast. I have seen grandmothers who had seen the ravages of this disease in their own families, weep with joy at these results. How efficient the remedy is I had a chance to see. One winter 98 cases were treated by me and my assistant without a single death and in a community in which a grandmother had buried five of her children within a week less than 20 years before.

The next step in the management of diphtheria was the discovery that if a small amount of this antitoxin was injected into a healthy child the disease did not develop. Many others working on the problem made modification whereby the disease could be prevented by milder means. Now it is possible to make a test to determine if the child is liable to the disease and thus determine if even a preventive dose is needed. Today diphtheria is unknown except in a few centers of population where children are bred and then trusted to fate. Human stupidity and not diphtheria is the guilty party.

The conquering of diphtheria shows how scientific medicine has worked out. A number of scientists had part. The first step was made when Koch discovered bacteria and how to prove that they were the cause of a particular disease thus establishing bacteriology as a science and formulating the working rules for future investigators. Klebs discovered the

diphtheria bacilli, Loeffler proved that they really caused diphtheria. Behring developed an antitoxin which cured the disease once it had developed and prevented it in healthy children. Hundreds of workers have added details until we have the perfected remedy as it is today. The causative organism was first definitely identified in 1895, after I had been in practice a year and had already become acquainted with one family in which eight children and the father died of the disease.

The conquering of typhoid fever was an equally brilliant achievement. The bacillus of typhoid fever is a little rod possessed of innumerable little legs which enables it to wiggle across the field of the microscope, a real devil incarnate. I was a victim of the disease the results from which I have never entirely recovered, picked up while I made my weary rounds visiting the sick, too weary to take the proper precautions in protecting myself. The only positive result from my labors was a chance to see how the disease acts when it runs its course uninfluenced by treatment. Having lived through this period of despair in treatment I can appreciate the meaning of the final control of the disease.

As I look back on those years I picture myself as a pup barking at a porcupine, so futile were my efforts. Of course my ecclesiastical brethren helped. They prayed but the porcupine ambled on. Despite both our efforts, the disease progressed on its methodical way to recovery or death. I could tell usually some days in advance if the patient was to recover or die. My colleagues could not foretell events. They prayed just as enthusiastically for the recovery of one already well on the way to recovery as patients already moribund. I knew that save for a slight fluttering of the heart the patient was already dead. They prayed that

the soul might find its God. I knew it had already gone, wherever it was destined to go, there was sometimes a difference of professional opinion on this point.

One cannot escape the conclusion that we professional persons were equally ignorant, both wholly useless except possibly we did bring some comfort to the family, but I sponged the patient hours upon hours when the fever became menacingly high. I lessened the patient's delirium which at least gave the family comfort even though the unconscious patient was indifferent to my ministrations. At least I stayed on the job. To keep busy when one's soul is torn with a sense of helplessness is the best means of speeding up the trying moments. So it came about, as I look back on those nights, I was the chief beneficiary, as is always the case where honest effort is expended, no matter how futile it may be.

As was the case with diphtheria, the causative organism of typhoid fever identified, science walked straight to the discovery of a serum that prevented the disease and all but banished it from the face of the earth. If the God of the universe ever heard the "please" of the scientist it was during the search for a means of control of typhoid fever.

II

It is of interest here to hark back to the relative mortality of combat and disease in the Civil war. In the Union Army we have the following table: killed in battle 44,238; died of wounds, etc., 49,731; died of disease 186,218; died of unknown causes 24,184; total 304,369 men. The Confederate Army fared no better: according to Dr. Joseph Jones the deaths in the Confederate Army during the war did not fall short of 200,000, three-fourths of the number was due to disease and one-fourth to the casualties of battle.

Why do I say this? Here is the reason as empha-

sized by but a few figures. During the Spanish War, speaking in round number of 100,000 soldiers in our armies, 20,000 were stricken with typhoid fever, of whom 1,500 died. In the South African war of half a million soldiers engaged, there were 60,000 cases of whom more than 8,000 died. The sanitary conditions in the various camps were deplorable. Our sanitarians lamented exceeding lamentations but it did no good. It was just another instance in which authority and intelligence did not rest on the same shoulders.

Mortality in World War I offers a pleasing contrast. In the U. S. Army of more than 4,000,000 men only 227 died of typhoid fever.

It is pleasant to be able today to assure the mother of soldier boys that typhoid epidemics can't happen again. These things are now controlled by such men as Parran, trained in the work in contrast to the past when orders emanated from politicians with a rose in the lapel of their coats and spur-booted gentlemen clothed in ignorance of things medical. Now the soldier boy receives a few injections of serum in his arm and as he goes marching away he can give his mother positive assurance that he will not have typhoid fever. That is the comfort the laboratory worker has brought the distracted mothers today.

We have yet to record a humiliating paragraph. This is all the more distressing because it all took place in our midst, and even more so is the fact that we are still helpless. I refer to influenza. In the epidemic 1918 there were four million cases in this country. In our army 800,000 had influenza of which 24,000 died, nearly equal to the 34,000 killed in battle. The tragedy of it is that this great mortality was largely due to official stupidity. It was just around the corner from the time when "war was 3000 miles

away” and “we were too proud to fight,” as those who govern us declared.

The management of these patients shows one of the perils of central bureau therapeutics. Their stupidity was manifest in the first place in camps where the disease was already present and where trainloads of healthy boys were dumped in against the vigorous protest of local medical officers who saw and had to live through the tragedy of it. Local country doctors in Kansas knew these patients did best in a superheated room ignoring all ventilation if need be. One of my old doctor friends knew some things by experience. He kept his patients warm. In fact he covered the entire chest of the patient with stewed onions and then covered the patient and poultice with several layers of blankets. The first case I saw in consultation I was quite overcome with the stench. If it did not stink to high heaven it at least reached far above my head. The old doctor noted my discomfort and calmly remarked: “Yes, he stinks now but in two weeks he will smell fine. If you treat them with cold air like the city fellows recommend, well the odor in ten days will not be nice.” The patient recovered and is still living.

The difficulty was because some “researchers” had concluded from a bacterial study of the disease that they had to do with an ordinary pneumonia and cold air was supposed to be the proper treatment. Studies in influenza now in process of development promise much in the treatment of many types of pneumonia. In my family doctor days I felt quite satisfied when I could identify a pneumococcus. Now it has been found there are many forms. No great difference, so long as there was no curative treatment but now there seems to be a remedy for certain forms which demands the services of the bacteriolo-

gist. It is pleasing to note that the discoverer of the cause of pneumonia, a diplococcus, was Surgeon General Sternberg, one of the ablest of the early bacteriologists.

But those 1917 "researchers" did not know that the pneumonia they had studied was wholly different from the lung complications of influenza. The result was a terrible mortality among soldiers housed in an unheated shed.

I mean to say the boys died. One train out of Camp Funston bore the bodies of 174 soldier boys. So terrible was this load that the train was held in the suburbs until nightfall and the station was deserted. It was feared that such a scene would excite the public indignation to an alarming degree. As a doctor I urged the railroad official that just such an uprising was needed to create an outcry loud enough to be heard by those responsible for the situation. Freezing flu pneumonia and the terrible mortality continued.

A distressing incident causes the event to remain fixed in my mind. That very day I was talking to a friend of mine whose son was in that camp. He told me his boy was all right, had a letter two days before. Neither of us knew it but his boy was in one of those baggage cars. This boy was sick in a simple board shed and his "nurse" was an orderly who a month before had been an "orderly" in a meat market. My friend naturally was frantic, and he told the wise boys what he thought of them, and many agreed. Kansas folks will remember this event.

It is pleasing to note that military medicine is much better done in the present conflict for several reasons: (a) greater effort is made to put competent men in charge; (b) fortunately nothing has happened to really test central management. We are not sure we have a remedy for influenza but in the newer drugs there is reason to believe the mortality

will be lessened 90 per cent and the disability lessened from 10 days to a day, and with a corresponding likelihood of not spreading the infection.

Influenza's country cousin, the common cold, still remains on our pages of unfinished business. Allaying of itself, often tending to loss of time, not uncommonly lighting up slumbering disease or adding to the load of flagging organs, it adds up to a serious menace. Ask a doctor what causes cancer—he will reply that he does not know and we will solve it some day because we know something of the biological factors underlying it, but the common cold is different. Ask the doctor what to do for a cold and his face pales in distress. Perhaps the drugs that promise so much for the cure of influenza may solve the problem of the common cold. The prevention however is a matter for the future.

Almost a minor disease today but more a matter of concern was malaria, chills and fever, to past generations. The history in brief may be noted. An animal parasite was discovered by Laveran, a Frenchman, in 1880. Seven years later Arnold Ross, an Englishman, discovered that the disease was developed in a certain type of mosquito. Now not to get malaria is not to get bitten by the particular type of mosquito. Since not everyone can identify this variety one avoids all mosquitoes. The story of the treatment is equally simply told. A lady visiting in Lima got chills and fever. One day a native brought her the bark of a tree which the native used to control the chills. Two years later Jesuit priests took the remedy to England and it was named Jesuit powder. Now the active principle is isolated and we call it quinine. Today all the available supply of quinine is in North Africa. The commercial value of the discovery of the cause of malaria is familiar to everyone

familiar with the history of this country and particularly of the South American countries, particularly in the region of the Panama Canal.

Even more the conquering of malaria from a commercial point of view was the annihilation of yellow fever. Originally a disease of Africa, merchant ships carried it all over the world. For instance in 1793 more than ten per cent of the population of Philadelphia died of the disease. It is estimated that there have been half a million cases in the U. S. The last important city to be afflicted was New Orleans in 1905.

The causative agent long escaped discovery. Dr. Finlay, a Cuban, suspected the mosquito suggested by its relation to malaria. Congress appropriated a commission to investigate the cure of the disease, and it achieved its end, a most extraordinary result of a committee appointed by Congress. Please note an Army doctor, Walter Reed, was appointed to head the commission—likely no politician had any desire to visit a country afflicted with yellow fever. With a number of assistants he went to Cuba and began his investigations. A certain type of mosquito was proved to be the guilty party. In order to prove guilt a number of volunteers allowed the mosquitoes to bite them. One of these volunteers was Dr. Jesse Lazear. He lost his life. Another of the chief actors was James Carroll, an Army surgeon. He contracted the disease and never fully recovered and died seven years later. Simple story. They gave all they had, their lives, that others might live. A number of soldiers in the ranks offered themselves but pleasing to note these all recovered.

Major General Gorgas took this knowledge and freed Havana of yellow fever. Then he tackled the Panama canal. Malaria and yellow fever had stopped a

previous attempt to dig the canal. He destroyed the breeding places of the mosquitoes. Now that region is as healthy as any place, but the sanitary conditions are matters of eternal vigilance.

If civilization wants a job done it is obvious that the best combination is doctors and soldiers. We see it in pestilence and in war, but it has not yet convinced us that it applies also to peacetime. It should be mentioned that a Baptist, Rockefeller, carried the war against malaria and yellow fever, as well as other communicable diseases throughout the world. A recent book, *Ambassadors in White*, by Wilson, gives an accurate account of this work. Doctors are his agents. One cannot help but wonder how Mr. Rockefeller's booth on the Elysian shore is labeled. I am particularly interested because my friend, Dr. Barber, has been an advance agent for more than thirty years. From his letter quoted in another chapter one has the feeling that he will be too modest to ask Peter for admission.

This reminds me that none of these servants of mankind have been awarded the Nobel prize nor have a monument erected to them. One replied in answer to this question: "It is well; the name of the prize would have frightened them, and all that money would have obfuscated them, besides it is better that posterity should ask why was not a monument erected in their name, rather than have posterity gaze at a monument and ask, "Why was this pile of rock erected to keep emphasizing his mistakes?"

In civilian population immunization is not generally sought in the prevention of disease, chiefly because of general opposition of the public to do anything to prevent the occurrence of things which they cannot visualize. To compensate for this public stupidity the sanitarian stands guard. If there is no first case

of typhoid fever there will be no second and so on. He watches the food supply, particularly the milk. If in a rare case a patient becomes afflicted with the disease the sanitarian goes into action with an enthusiasm equalled only by J. Edgar Hoover and his boys after kidnappers. Result in both cases is the same foregone conclusion, annihilation of the culprits.

Another scourge of my early practice was lockjaw or tetanus. It is called lockjaw because the contraction of the throat muscles is so intense that the mouth cannot be opened. Not so common as typhoid fever and diphtheria, yet I averaged in my early years of practice three or four cases a year. Nearly all children and half the adults died after long suffering. The terrific spasm of muscles caused by the toxin of the bacteria caused the most intense suffering, terrible to observe. All I did was to sit by, hypodermic syringe in hand, to lessen somewhat the pain. I could foretell with a fair degree of accuracy the outcome. If the disease began within four days after the receipt of the injury, all died; if after two weeks, all recovered. In the interim most children died, most adults recovered.

The discovery of the means of control of lockjaw followed much the same pattern noted in the case of diphtheria. Behring, of diphtheria fame, discovered a serum in 1890. The serum when administered soon after the receipt of a wound prevents the disease. Things which affect one personally make the deepest impression. Instead of standing helplessly watching these patients die, now when a person is injured I just tell one of the cub assistants to give the patient a prophylactic injection of antitoxin serum and we all forget about it. Even in cases in which the preventive injection has been neglected, the use of large doses of the serum may cure the disease.

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So efficient is the preventive treatment that we can say now positively if a case of lockjaw develops following a wound someone has been negligent, the patient or the doctor. Fortunately the laity are so thoroughly educated as to the importance of little wounds, particularly on the feet, that they go post-haste to the doctor. When I recall my early experiences with this disease and realize I shall never need to go through them again, I become spiritually a Caruso, for here briefly is what has been accomplished: during World War I, of 250,000 wounded, only 36 developed tetanus, only 5 died, so effective was the prophylactic use of the serum. Look at this and marvel at the accomplishment.

The disease the control of which brought Pasteur his greatest renown was mad dog bite, hydrophobia, rabies scientifically speaking. Hydrophobia or rabies is not a common disease fortunately but untreated it is always fatal. It is what is known as a virus disease. That is to say we know that it is transmissible from animal to animal and from animal to man but no visible organism has been discovered. Nevertheless an agent has been discovered which prevents it just as antitoxin does diphtheria. Galen recorded the disease. It is called hydrophobia (fear of water) because the sight of a cup of water excites the spasm of the swallow muscles just by suggestion. The disease follows a bite by a mad dog or other animal. It may develop as early as eight days after the bite of the animal but it may be deferred as long as a year.

As the most terrible scenes these old eyes have had to witness I nominate rabies. I sat through the night with a boy fourteen years of age. The ordinary doses of sedatives were without effect. I administered seven grains of morphine, in quarter grain doses during twelve hours. Nothing less gave him relief. At the

break of day his excited pulse suddenly began to slow and stopped just as the sun shone across his bed. It gave me a funny feeling because of the large amount of sedative I had used. I record this as my most notable act of mercy. I felt that the rising sun sort of said to me that it was merciful, perhaps only with limitations. I knew at a glance when I first entered the sick room that the boy was doomed. By the administration of sedative medicine I kept him unconscious of pain while the disease progressed to an inevitable end. Thus it comes that we prolong even certainly fatal disease as long as we can. The really merciful thing to have done would have been to use chloroform. If I ever am afflicted with this disease I should want an anesthetic continued to the end. Here it is that the doctor does not have the courage to follow the dictates of the Golden Rule. A sense of fallibility stills our courage, we might be wrong. It has never happened but sometimes possibly a patient may recover.

Pasteur worked out measures whereby in persons bitten by a rabid animal the development of the disease can be prevented. He discovered that in cases of rabies he could inject certain substances into rabbits and obtain a serum which when injected in series into a patient bitten by an infected animal the disease did not develop. Another scientist took a hand. Negri found that if an animal has rabies certain funny bodies develop in certain cells in the base of the brain of the rabid animal and the person bitten by the animal may develop rabies. Therefore the patient is at once given preventive treatment. Now if Johnnie is bitten by a dog which is mad you cut off the animal's head, send it to a competent pathologist; if after a careful examination of the animal's brain no Negri bodies are found, he says the dog

was only merely peeved and really was not mad. That is the animal did not have rabies, hence the bitten person will not develop it, and is told to forget all about it.

Examining for evidence of disease in a suspected animal places a great responsibility on the laboratory man. If he makes a mistake, and the prophylactic serum treatment is not given, the patient will die. The test saves the suspense during all this period when it is still possible that the disease may develop. In those early days people were warned not to kill an animal supposed to be rabid. If the animal did not die we knew the bitten person was safe, for all rabid animals die. Unfortunately when an animal ran amuck it was promptly shot and disposed of. All we doctors could do when he had a patient who had been bitten by an animal we were suspicious of being rabid was to be frightened out of our wits. When I had such a problem on my hands the sound of a galloping horse nearly gave me a fit of distraction as the possibility of a message from the patient flashed into my mind. This period of suspense lasted, as noted before, for a whole year. Only one soldier died of rabies in World War I.

III

We come now to the physicists. The only time I had the privilege of seeing Professor Roentgen I felt sorry for him. He seemed undernourished and had a furtive look. His long unkempt beard suggested that he had little money to spend on his personal appearance. Be this as it may, he discovered the x-rays.

Just take a look and see what the Professor has done for us. When I began to practice, if we had, or thought we had a broken bone we took a look, made a guess and fixed it up. If we made a bad guess and the patient did not like the results we got

sued for malpractice. The attorney for the plaintiff showed the assembled multitude in the court room what a rotten doctor we were and the newspaper men distributed the glad tidings and everybody was pleased to have a confirmation on what was his previous opinion of the doctor.

Now we take an x-ray picture of the injured area and if sued we take it along to court to prove we were right. We vastly lessen the liability of a visit to the judge by setting the fracture and then taking another picture to see if we did a good job and if not we try again. Or still better we manipulate the bones into place while under the view of the fluoroscope.

If somebody got a needle or a bullet in his anatomy, formerly we guessed and took our journey into the haystack looking for the needle. In those days of low pressure ammunition the bullets stayed somewhere in the body and we had to guess whether the closest approach was from where it went in or from the other side. Now we get an x-ray picture and see where it is. Of course now the modern bullet goes on through and the officers dig it out of the car cushion or the bedroom wall.

But the location of foreign bodies is the smallest part of its use. Formerly if we thought a patient had an ulcer of the stomach we took a guess. If he died of hemorrhage we knew he really had an ulcer. If we suspected a cancer of the intestinal tract we had the choice of cutting a neat little hole in the front of the patient to see if he had cancer, or waiting until we were sure of the diagnosis and then we knew it was too late to do anything for the patient. Now I have it easy, I just say "George, see what is wrong with this guy." The next day I read the report. No worry, all the responsibility falls on George. These

are only a few of the more common conditions in which Roentgen has helped the human race.

But the x-rays have other uses. It cures some cancerous growths and in many more lessens suffering and prolongs life. The efficiency in the management of malignant lesions grows greater year by year. Unfortunately the possession of an x-ray machine does not thereby make a radiologist of the owner. So true is this that when I am asked about the advisability of this means of treatment I ask who is going to give it before making reply. There are two possibilities: Too little does no good, too much may produce irreparable injury.

The list of the uses of x-rays is endless. It controls itchy places, no matter where located, all kinds of skin troubles and even removes hair from bearded ladies; sometimes I must warn, it also removes the skin.

One of the most fascinating stories in medical annals surrounds the discovery of radium. It has a general appeal because Mr. Curie had a wife, Mrs. Marie Curie, who was smarter than the husband, thus confirming in one instance what many ladies suspect. In conjunction they developed in addition to radium a very talented and beautiful daughter making it possible for additional romantic stories, and proving that comeliness and intelligence may coexist.

Radium is used in the cure of many of the diseases for which x-rays are used. Radium has one interesting feature which if we could cross it with money would make it an even greater help. Radium never grows less, it shines and shines from now on.

IV

We must take a look now at the biochemist. He is a person who tries to figure out the chemistry of living tissue which of course he never does because

what was living tissue is dead when his analysis begins or at least when it ends, but he has found out a lot of other things. Now when a person acquires a cubic displacement no longer pleasing to his wife's eye he just has become too fat. Not so in former years. Then if a person took on much avoirdupois there was the worry that he might develop diabetes and if he did, it was just too bad. He was put on a diet which took from his dietary all those things he liked, which included almost everything, and he lived a miserable life without anything much to eat until he was overtaken by diabetic coma and then he slept from then on.

Then comes a very inspiring incident which can be told on American soil which adds to the pleasure. A young Canadian, Banting by name, practicing in the country, was awakened by a hunch, or a mystic spirit or something, which told him that if he did something to the pancreas of a dog the dog would do something to his pancreas and as a result of the joint efforts a substance would be produced which would control the diabetes in the human patient and he would be comfortable and would live indefinitely. The tale is simple. Banting did, the dog did and the patient does. "Saw sub, sank same," just like that.

I must interpolate here that in a number of instances I have asked scientists who had contributed notably to existing knowledge how they came by the idea. To quote only one: "Well I don't know. I was startled out of my sleep by a hunch and I got up at once and wrote out an outline of the research I was to perform." I have noted elsewhere that the God of Moses never told anyone anything he did not already know. Here some still small voice, call it what you may, told my friend something he did not know and what was new to the world. But the

still small voice tells these secrets only to those prepared to receive them. Funny business. Prepared how to receive what? The life of Banting is one of the most inspiring stories written about the life of any man.

This is to me one of the most perfect examples of research in all the annals of science. No other scientific study has gone so quickly and surely from primary concept to certain achievement. The procedure can be outlined in simple terms. Young Banting and his inspiration went to the University of Toronto to work it out. He was assigned six dogs and a young scientist named Best, and he turned out to be just the best sort of assistant. In their researches these two young men proceeded just as unerringly as Moses did when he created the earth, but they guessed right. The result is that patients with a very common disease for which we previously had no remedy can now live comfortably. Not a cure but the next best thing, the ability to live with their troubles. That has a domestic connotation but it is clearly scientific medicine. Here let it be noted in passing a man in the country took his idea to the university but to the vast credit of the latter they gave the man with the idea chance to work. It has not always been so.

Though these researches of Banting and Best excite only limitless admiration for their work, it is the untimely and tragic death of Dr. Banting that crushes us in unending grief. The story only recently was in the papers and need not be detailed. He started from his home in Toronto for England in a plane to help the Mother Country, yes to help the Mother Country win the war. An airplane accident, a heroic death. He won a brilliant victory over disease by the use of scientific methods but was himself lost in the war of or for what? Though himself mortally wound-

ed he ministered to his pilot. In death as in life he was a hero. He was a war casualty in the War of Statesmen after winning a most brilliant battle with disease. It is such men to whom fate whispers her secrets.

Now we come to consideration of the achievements of the chemist in the aid of scientific medicine. We call this chemical therapy when a chemical compound is discovered which actually cures a specific disease. Drugs may be chemicals too but a drug is something which we believe, or hope, will help the patient. Sometimes we know better, as sulphur in diphtheria, but we must do something while we wait for some more useful thing to be discovered. This is of course an unpleasant confession because it sounds as if we engaged in hokum. In distress we just must do something just like the portly gentleman when he steps on a banana peeling, throws up his arms. We take some comfort in the fact that we are not the only profession which practices hokum but we are the only one struggling by honest effort for something better.

But to return to chemotherapy. The most notable was the development of 606 by Ehrlich as a remedy for syphilis. That number means that it was the six hundred and sixth chemical he had investigated. The original drug, the 606, has been modified by others but it stands at least as evidence of the possibility of developing chemicals which are specific cures for certain diseases. One might think that Ehrlich did 605 useless experiments. Not so. Edison after trying 5,000 different substances was quite satisfied for he had a list of that number of substances which would not work as a durable light filament. There is a vast detail of work in scientific medicine which fails to do what was expected. These failures are recognized, acknowledged and avoided in the future, but a failure in one

generation may be the stepping stone for success in the next when added knowledge and technical facilities make success possible. (Like the PWA, now even the wise boys know it did not work.)

I must mention in this connection two young Bostonians named Minot and Murphy who take permanent places on the pedestal of fame. There is a disease of the blood, not in the quack sense, but one in which something happens to the blood, nobody knows what. It carries the ominous name, pernicious anemia, because it deserved just such a name; it killed the patient. We ran around in circles doing all sorts of things; if they got better the remedy did it. We transfused blood from healthy patients, helped it for a while.

But Doctors Murphy and Minot got an idea or perhaps as in the case of Dr. Banting before noted, the idea got them. At any rate they fed the patients liver and they got better, not now and then but all of them. It helped, no doubt about that. Before the discovery of the value of liver in the treatment of pernicious anemia the liver of slaughtered animals rated very low as an article of food. The fact is when one bought a T-bone the butcher just put a piece of liver on top for the dog.

Following Drs. Minot and Murphy's discovery the liver suddenly became the most sought after article of diet on the market. There just wasn't enough liver. The demand for liver became so great we anticipate the government will form a bureau of GBL. That is, it will be organized to encourage animals to Grow Bigger Livers. The board organized to administer this committee will be headed most likely by an eminent violinist and his orchestra. I suggest these as candidates because they likely do not know where the liver is located. Every agriculturist owning one

or more food animals will come under their jurisdiction. They will issue an illustrated circular showing just how to administer the food into the faces of the cows when in the act of reaching for a low note. No doubt it will work, but it will make the farmer's own personal liver go sour.

One other name must be recorded as among the noblest of mankind—Joseph Goldberger. Throughout his life he studied the most obscure of diseases, pellagra, and finally solved the problem by a simple process of dietetics.

To understand the importance of this work one must have known these patients. Chronic skin eruption, uninfluenced by any local treatment, mental deterioration to complete incompetence enduring years without end. This statement is wholly inadequate to present the picture because it causes suffering for the associates as well as the patients. This study required residence among the afflicted, among the poorer classes, the most difficult people to excite to cooperation. In this study it was necessary to conduct observations years without end. Such labors are little calculated to excite the interest of the public and only time can bring recognition.

I cannot refrain from noting a fact though it be irrelevant as science, and perhaps irrelevant in other aspects. Dr. Goldberger had a gentle wife. She raised his children, furnished him a haven of rest in the short periods between his scientific expeditions. I mention this here because I have suggested that such a conjugal admixture would solve one of the most perplexing racial and religious problems. This fact should be added to Dr. Goldberger's other scientific achievements. It is particularly noteworthy that he discovered the cause of and formulated a cure for this disease.

Pneumonia has been called the old man's friend. When his day was done it quietly put him to sleep. Usually it is dependent on a failing heart. The circulation slows, the lung becomes congested, he loses consciousness, and with it all contact with the world, and he goes gently to sleep. It is really not a disease of the lung at all.

The ordinary pneumonia is of a different sort. It affects one or more lobes while the remainder remains relatively free. A chill, a pain in the chest, and in a week or less he goes through a crisis when the fever drops and he recovers, or it does not and he does not.

Though the causative agent is known, it is yet an incompleated chapter, no dependable antitoxin has been discovered. Most acute bacterial diseases of which we know take their chief toll in adolescence. Pneumonia on the contrary counts its chief victims in adults in the middle years. Pneumonia is most fatal in heavy deep chested persons, many of them in the midst of a brilliant career. When this type of person develops pneumonia he is doomed unless the new drugs can save him.

Pneumonia stands third in the causes of death in this country. In round numbers there are 400,000 cases annually, a fourth of them resulting fatally. Hippocrates wrote a good description of the course of the disease but it was not until 1881 that Pasteur and our own Surgeon General Sternberg first identified the causative bacterium, but its specificity was left for Fraenkel to demonstrate in 1884. Since then much has been added by separating the organism into a number of groups.

No disease has defied all efforts at finding a cure more persistently than has pneumonia. In a large hospital a compilation of statistics was made covering

all cases over a period of 50 years. The death rate remained the same despite many changes in treatment. Only within the last year or two has a new hope appeared. In the new drugs, the sulpha compounds have shown a very definite curative effect. The profession has been both surprised and obfuscated at the unexpected results. That it is very effective is apparent but it will require study by many observers over a period of years in order to determine their actual value.

More recently the efficiency of the sulpha drugs in controlling certain heretofore uncontrollable diseases has the profession at the present time dizzy with confusion and silly with delight. This offers a hope that a remedy for pneumonia is about to be demonstrated.

There are at present researches going on that are startling in the possibilities they hold. One has to do with gramicidin. This is the product of bacteria of the soil now being investigated by Dubos. It is too powerful to permit of its being introduced into the body and can be used only by local application in chronic infections notably in bone. It clears up these infections. The remarkable part of this investigation is that it is found outlined in notes left by Pasteur, just incidentally discovered years after his death.

Cholera, like yellow fever, is controlled by sanitation. We know the bacterium which causes it but we have no remedy. The sanitarians quarantine against the disease to prevent its spread. It is like riding in a Pullman car. We ride contentedly because experience has told us we are safe. We do not realize the infinite pains that many men must take to make it so. One slip in any of these and we land in the creek instead of in the dining car for breakfast.

The dramatic pictures in modern scientific medicine are written by those who discover fundamental causes

and apply remedies which remove the menace of the disease from mankind from now on.

In comparison to the scientists above mentioned we surgeons are pikers, we work on one patient at a time. There is no such satisfaction of starting off an endless chain as for instance the control of diphtheria. Broadly speaking we practice an art, but practice it as we become more expert and thus lessen mortality.

Even so we are scientists in so far as we have appropriated the discoveries of the scientists to our uses, notably the discoveries of anesthesia and the bacterial causes of suppuration. The anatomist, the physiologist and the pathologist taught us our alphabet so that we can read at sight. A surgeon in an operation cannot stop to think, he must see. His mind's eye presents a visual memory of the various layers of structures before him but the type and the extent of disease he must attack. Thus it is obvious that if a surgeon has brains he can use them to advantage, though one can get along quite well with a very small amount.

We have made tremendous advances and it takes a lot us to apply our art. Progress has been painful. It has been dependent on increased knowledge and perfection of the technic of the operation. A surgeon, as one eminent representative of the art once said, is like a pianist, he does a better job after he has tried it a few times. All have a piano and ten fingers but it is experience that counts, added to perhaps some inherent ability.

I have seen most of the advances made in surgery. Nearly all of the things done in the cavities, the skull, the chest and the abdomen are practically all the development of the past fifty years. For instance my grandfather died of strangulated hernia, my father of enlargement of his prostate. Today their de-

scendent could relieve them in half an hour and have plenty of time left to beat his inflated chest.

Only a few of these advancements of surgery can be indicated here. The attempts to advance and the failures would unfortunately fill as great a space. The dictum "cut and try" was first applied to the fashioning of garments, but applies equally to the early surgeons. Since that early day general science has added enormously to the basic knowledge which has made this advance possible.

The details in the advancement of surgery are interesting. Sometimes we do more, sometimes we do less. Formerly we drained the gallbladder when the patient had stones, sometimes too when they had none, now the x-ray man tells us for sure whether there are stones or not. Now we take out the gallbladder, except under certain conditions. Patients sometimes inquire how they are to get along without this organ. Dr. Fenger once made reply to this question: "From now on you are a horse; they never had one." Sometimes we do less. When tumors of the uterus were first successfully removed the entire organ was sacrificed. Now experienced surgeons rarely do this except for one condition, cancer. The uterus has a purpose besides raising babies. It is important to the patient to keep her nervous balance. Besides being a mother, she also is a woman. The younger the woman when the uterus is removed the more dire the effect. Nothing is more tragic than a woman who has had her entire uterus removed at an early age. I have seen literally train loads of these unfortunate women. The thought of it makes me sick.

So great has been the added knowledge that surgery has been divided into many specialties. The eye man first made himself a field. The brain surgeon has appropriated the skull and its contents. The orthopedist

has made the miracles of a bygone age a reality, he makes them walk. The lung surgeon is the latest addition.

As noted above I have seen the development of most of what constitutes modern surgery. Despite grueling toil the procession has outdistanced me. I see before me a dusty road ahead in which I know the advance guard is traveling at a mad pace while I trudge behind at an ever slackening pace. The tragic part of a surgeon's life consists in that he takes his successes, or he should, as a matter of course but his tragedies live in his memories. "If I had done or if I had not done," constantly recurs in his memory to haunt his declining years. Though my hands are as steady as ever, my eyes undimmed, my heart is heavy because of the things I have not achieved. It seems that the span of life set at three score years and ten mercifully had the surgeon in mind and he looks longingly to a surcease of his responsibilities. He cannot achieve the cheering hope of Will Rogers: "All there is to life is to go away satisfied." It is not for the doctor to look back on his work with tranquility. He sees before him his final couch on which he must lie down conscious to the last that his best was not good enough. One at least has the satisfaction of knowing that those who come after him will do it better.

In these few pages it has been possible only to point out some of the high lights which have marked the conquering of disease. Everywhere we see the same thing. Advancement comes out of the mind of some man or woman. We see the same thing which stood out so tragically clear in the history of medicine in the Renaissance. To determine the laws of nature and employ them to our purpose. These laws are unchangeable, once conquered or understood the knowledge lives for all time, for the benefit of all children of mankind.

CHAPTER XV

MEDICINE NOW—WHAT COMES NEXT

In the preceding chapter I detailed some of the achievements of scientific medicine. It has achieved much more. It has shown that we advance only by the honest effort of an individual from whom it extends to others. Evidence indicates that no honest effort is ever lost. The evidence of science is that death ends all so far as the physical being is concerned. Yet it never dies, it lives on in the children, in the influence on others, which in turn lives in others. This is true of all advancement achieved by man. It lives on in the achievements of men. Much has been done but there is much yet to be accomplished though achievement inspires us. We hold up our arms to nature's God and know from the past that by labor we shall understand more and more. Perhaps some day we shall know what the still small voice in each individual means. To know the truth and to expand its limitations is the beckoning hand of the scientist.

What the science of medicine has done for the cure of disease is easily recorded. Only the presentation of the barest skeleton of its achievements has been recorded in the preceding chapters. Medical science is hot on the trail of the diseases it has not conquered. The chief problem in medicine is to induce the public to accept its benefits. The failure is due to the indifference of the individual to what is to his benefit. Medicine is struggling against the indifference of the individual on one hand and the limitations imposed by laws, ecclesiastical concepts which find expression in the rulings of our judges. Everyone can see what the science of medicine has accomplished but the inference is that doctors are morally inferior

and are not to be trusted to do the best for the human race, even though they have given their lives to demonstrate that they have done the best for their fellowman.

I

It must be admitted that the achievements of medicine must be in a measure in the abstract. The full benefits have not been delivered to mankind because of the opposing forces above noted. But there is yet another phase, something that comes much closer to each doctor's heart. Unfortunately medicine is not accessible at its best to everyone because that would require that top experts be present to apply their skill for all patients alike. There are not enough Carusos to sing to all the world. Likewise the most expert in medicine are accessible to but few because there are not enough real experts to go around. The most of us rate about 280 batters, good enough to click in the big leagues. There was but one Ty Cobb in baseball, and few practicing clinical medicine. Many of our big men have remained in science and even there they are few. We must look at the matter here from a practical point of view. The science of medicine means to the individual just what kind of doctor is available to him when he is sick. What the most expert could accomplish were he present is for the moment of no concern to him. All doctors sometimes lack just a little of being perfectly efficient, rarely wholly wrong I hasten to add.

One of the greatest difficulties lies in the fact that the public does not want the best that is available to them. Intelligent people make the best patients. A man who is an expert in his own line is almost certain to take the judgment of the doctor he has selected. The ignorant on the other hand must subject the advice of the doctor to their own analysis.

That is the class who when advised to submit to a certain procedure reply that they do not feel bad enough to submit to an operation and they return in months or years when operation is no longer possible. They seek the advice instead of those who assure a cure by more pleasant means. For instance a lady when told a goiter must be removed replies "I prefer to be cured without operation. I shall seek someone who will cure me with medicine." When this search proved futile she returned to the medical expert only to accept the expert's verdict—too late, and died of a goiter heart. The fault is not with scientific medicine nor with the doctors. It is due to the fact that the moron mind medically speaking is trained to believe the impossible. The ability to write poetry does not imply that appeal to the stars will be rewarded when they have a goiter.

Everybody has the right to do with his life what he wishes. The public demands that the laws governing medical practice have sufficient loop-holes to allow them to do the fool things they want to do and our legislators supinely oblige. Do legislators seek the truth? No, only votes.

Laws are funny. If a man tries to commit suicide by shooting or other means and makes a botch of it, he is arrested for discharging firearms within the city limits. But if he selects a quack route it is perfectly legal, if he stays within the regulations of the particular kind of quack selected. When we doctors seek laws to protect the public from this folly we are accused of selfishness, attempting to form a trust. A moment's reflection should show the shallowness of this viewpoint. If a patient wants to neglect himself and die it is his affair. When a doctor delivers his advice and it is negated his responsibility ceases. Don't imagine the doctor retreats to his solitude and

weeps his eyes out. Personal failure only is his concern.

The public has no idea of how much laws could accomplish if they were enacted strictly for the benefit of the public. I have noted that strict sanitary laws were needed to compel the public to accept the benefits which immunity from communicable diseases brings them. In so far as the control of epidemics is concerned this has been achieved. But there is always a fringe of the contrary and ignorant who manage to ignore the regulations and then not only they but the innocent suffer. This is the reason that epidemic diseases are constantly present in cities. Here the need for laws to control the ignorant is obvious to the law makers. They do not want diphtheria and smallpox lurking in their own neighborhood. That is more important than votes. If the individual prefers to do fool things with diseases that are not "catching" that is another matter.

The need for laws governing the medical services for the individual is not so clear. To apply remedies to individuals affected with separate disease is a much more complicated matter than the control of epidemic disease. When a doctor encounters a communicable disease it is at once reported to the health authorities and quarantine or the removal of the menacing person is done. A man's life is his own and if he chooses to gamble it away by ignoring proffered assistance that is his concern is the theory. That this is true we can see exemplified every day. If he chooses to have his back manipulated while an ulcer ruptures, or if he prefers to trust to prayer as a peritonitis spreads to a fatal termination the state laws support him in the first instance and he receives ecclesiastic sanction in the other.

We doctors realize that we have grave responsibilities which we collectively must meet, and in a

measure protect the public from us. Even if the individual patient is intelligent and desires to avail himself of the best medical attention science has to offer the difficulties are many. The chief difficulty lies in the laws governing the practice of medicine. Once the young doctor has acquired his medical degree the State says he has the legal right to do to any patient whatever the patient will allow him to do. If he chooses to perform an operation which requires years of experience to do well and the patient dies, all the doctor has to do is to record that the patient died following such and such an operation and make the return to the department of vital statistics and it is so recorded and that is the end of the transaction, patient and all. Here again laws are not made to protect the patient but to please him as a unit in the electorate.

The medical profession itself is doing all it can to afford the public protection against incompetence which the state refuses to give them. Formerly if a doctor said he was a specialist he was one. That is still true so far as the laws go but the profession has now made available a list of competent specialists; those intelligent enough to do so are able to select a competent man. Specialists prescribe rules which a young man seeking to become a specialist must fulfill before they will certify him as reasonably competent to practice that specialty. For instance surgeons require at least five years of training under a competent chief before the candidate is certified as competent by the American College of Surgeons. Then he is only ready to begin.

It cannot be too often repeated that a specialist may be such in fact or he may declare himself to be such because the hours are pleasing and the remuneration satisfactory. Incompetent specialists are

becoming rare because the young man seeking a special practice knows it will pay in the long run to qualify himself according to the regulations laid down by specialists as the better results of a more competent man will in time become evident to the public. These advances it should be noted, are the results of the work by doctors themselves. They tire of meeting poor work by incompetent men both because it gives them pain and because it reflects on the profession as a whole.

II

In addition to the efforts of the profession to make available better talent they have cooperation from other sources. Most of the better hospitals will not allow surgeons to bring patients within their doors until they have the assurance that the specialist is reasonably competent. If as sometimes happens a surgeon well recommended proves to be inefficient, when he seeks to enter another patient the room clerk tells him "Sorry, no room available." Most well established hospitals have a closed staff and only those on that list have the privilege of bringing patients. This safeguards both the hospital and the patient.

A patient requiring the services of a specialist may be at a loss how to make contact with such a person. He may seek the advice of the family doctor, may ask the advice of a friend who has had such contacts. Many consult the classified lists in the telephone book. That is the worst possible way. In selecting a name from the classified list the prospective patient takes the specialist's own rating. A stranger without some advice obtained by social contacts or who finds himself in a community where he is unacquainted can find the information needed either by inquiring of a recognized hospital or by referring his query to the secretary of the county med-

ical society. Any person who wishes by following this plan can be sure he is employing a person of at least minimum ability.

The proprietary schools of the past were impossible and we trusted our future to the universities. The results have been both good and bad. We were taken over by the department of liberal arts, whatever that may mean. So often neither is apparent. One unbidden recalls a statement by Henry Adams "Nothing in education is so astonishing as the amount of ignorance that accumulates in the form of inert facts." Some preparation in general education is of course needed preliminary to the study of medicine. The college has told us what we need. They have the assurance of ignorance of the accumulation of facts which even if true do not apply. The students are subjected to grueling studies of no possible future benefit, and the students are rated on purely memory basis. They are kept as long as possible from those studies which have to do with the science and art of medicine. As one premedical student lamented to me "Why fool around dissecting pigs and cats, we are not going to be veterinarians. Why can't we dissect human cadavers?" I had to reply "Human cadavers are not dissected in the department of liberal arts and they like you so well they want to enjoy your company as long as possible, or perhaps they just like to see you squirm."

The young doctor half a century ago started out with the brains and character his parents gave him. His total cost of education would scarcely meet the expense of one year of his son's preliminary college course. There will be at least seven years of this, not counting his intern year and subsequent special training. The first three years are spent in college where he develops his mind and receives culture, according to the professors. Looking back on forty years of

teaching medical students I gain the impression that what culture they gain in those preliminary years is acquired from the coeds. The student acquires not only the coed's culture but also the coed, beautiful picture but premature. One thing the student does gain. Perhaps those hours the student is compelled to spend learning things which he knows are quite useless do have a use: it develops character and determination which will stand him in good stead after he acquires his education. The young graduate follows the biblical maxim "Seek you first food and clothing, and the kingdom of Heaven shall be added unto you" which to him is the coed. Then the experience gained in his preliminary education of doing things he does not like will stand him in good stead. He is now ready to take on his real education.

A person requiring medical service may consult a general practitioner, a specialist, or seek the services of a clinic. To avoid unnecessary expense the family doctor should first be consulted. He will know if the headache is due to overeating or to eyestrain or the use of hootch less than four years old. Eight out of ten patients are well served by a good general practitioner because many cases recover of themselves and the doctor is needed only to make such spontaneous recovery as agreeable as possible. His chief function however is to assure the patient that there is no serious disease present, to distinguish between tantrums, hysteria and perforating ulcer. All said and done, in the final analysis the adequacy of care is dependent on the ability of the doctor selected. The public may feel confident that a doctor trained in a modern medical school is capable of rendering the service here required and to call in or refer the patient to competent special service if needed. It should be remembered that one cannot judge the ability of a family doctor by the size of the town in which he lives. For

instance, one of the best doctors I ever knew practiced a lifetime in a town of 85 inhabitants. He was born a nobleman with a giant brain and he was imbued with but one thought, the service of his people and they were in truth his people until death separated them. I have known many such. In addition to adequate training much depends on experience and a medical sixth sense.

III

A clinic may be likened to a brass band. A clinic is a group of men representing at least the more important specialties. All right, the reader is entitled to his pun, each is engaged in tooting own horn. The value of the clinic to the patient depends on the ability of the men composing it, the harmony they can each get out of their own horn. It takes more than numbers to make a clinic. A check carrying only ciphers brings no money no matter how high sounding the name of the institution on which it is drawn. The advantage of a clinic lies in the fact that patients who need special lessons in horn tooting will find skills in the several lines or may consult them in series until the desired one is encountered, in one preliminary examination and under one roof.

At a clinic a complete examination can be secured in the minimum of time. Therein lies the chief advantage of a clinic. The aggregate expense too is less than if it were necessary to consult individual detached specialists because one complete preliminary examination can be used by all the specialists. For instance ladies need give their age but once and that to a lady secretary or to a young doctor without impressive income.

In cases in which one specialist only is needed such a clinic plan is needlessly expensive and time consum-

ing. If he has a bad tooth he knows it and the dentist fills the bill, and the tooth. If he has a bad eye he consults an oculist. If he has simply a severe headache due to an infection of one of these organs the specialist suffices. If the source of the pain is not known and he is not sure if he will need the services of a dentist, an oculist, a nose specialist, an internal medicine man, an ear specialist and possibly many others, including a neurologist, the clinic is indicated. If he has a pain, is losing weight, or is just generally sick the clinic is the place to go for in this case also he may require the combined efforts of a number of specialists to make an approximate diagnosis. Even with all that the surgeon may need to take a peek, though a little late, to see which, if any of the specialists was right. But it should be noted that in case of a really sizeable pain in the midriff the surgeon should be sought at once to remedy it or tell you it is not so bad as you feared.

One of the chief difficulties in seeking a clinic is that a clinic is only as efficient as the specialists who compose it. Baseball classifies their league from major to Class D. In that case one knows something about the kind of a game he will see before he pays his money. Clinics should be classified by those who compose them. Their equipment is very costly and the scenery is great so that so far as the prospective patient can tell everything is first class. Doctors do not publish their batting averages so patients must judge them by past achievement, that is by their reputation.

The difficulties of conducting clinics is impressive, to those who are impressed by the responsibility they must face. In the first place the equipment of a clinic costs much money and the upkeep is great. This is quite apart from the cost of the services of the personnel. Managers of clinics have as much trouble in organizing their teams as do baseball managers. One cannot do as recruiting officers are said to do, just

count the number of extremities and if the number equals four the candidates are all right. The four extremities a recruit for a clinic must have are character, knowledge, industry and a clinical sense required to estimate a human being quite apart from the local disease of which he complains.

The complicated machinery of the clinic then makes it necessary that the cost to the patient be considerable, more than necessary if the diagnosis proves to be simple. This means that those seeking the services of a clinic must in general be those enjoying more than the average income. The salaried person living on so much down and so much per month suddenly confronted with the need of expert medical services finds himself in a very serious situation.

To digress for the moment it may be noted that many automobile owners have their cars checked over periodically in order to discover some possible impending difficulty. Some persons think as much of their bodies. For these the clinic is the place for in rapid success all the various parts can be checked over. These cases it may be noted entail much responsibility for the patient may strongly suspect that he has something wrong and desires to see if the doctors can find it without the necessity of his revealing the nature of his fears. This really accrues to the benefit of everybody because every member of the clinic group knows that he must give his best services, not just a perfunctory examination as is done for instance in an examination for life insurance, or for matrimony in some states.

Returning to the consideration of top expense care for those who never expect to be sick certain measures have been proposed. It may be noted that I have avoided the current high sounding phrase of "adequate medical care" much prated by those ignorant of the meaning of it. The family doctor may provide

it for half a dollar. Schemes for insurance have been devised but this scheme finds its first difficulty in that just those who need it most do not avail themselves of it. With them it is the old gag "sufficient unto the day are the evils thereof." For those persons employed by corporations provision for sickness is made by the corporations. The politically solicitous it may be noted seek to duplicate protection already provided by the corporation. Small boys beating a Christmas drum imagine they are playing in Sousa's band.

From the hospital side the difficulty of the whole insurance scheme lies in the fact that persons who have paid for hospital services are going to have it, whether they need it or not. To treat a person afflicted only with a desire to be sick is a trial to all who have to do with their hospital care. The inevitable result is, being perfunctorily sick, they get perfunctory care. The personnel of the hospital becomes perfunctorily minded and the really sick do not receive the care they need. There is no way yet devised to make the improvident become provident. There is always the provident group to compensate for the improvident, and as above indicated though they provide for the improvident they themselves lose the care to which they are entitled. There is a lot, it will be noted, in the practice of medicine which has naught to do with scientific medicine.

On the whole the insurance plan has been a disappointment. Unhappily the bulging foreheads who conceived this noble experiment are not the ones who must endure the headache when it fails. The fundamental difficulty lies in the fact, if the fact has escaped anyone, that the scheme is sired by commercial greed and the offering of service to the sick is still a profession.

The difficulty lies in that the scheme has been borrowed from foreign countries where health insur-

ance is successful. There is this difference: here the patient tells the hospital what they demand, over there the hospital tells them what they will get. There is a difference; I have seen both ends.

Heretofore the demand for the most expensive form of treatment whether they could pay or not it was somewhat of a facetious observation that only the very poor and the rich could get the best treatment. For persons of low income or no income at all there are public hospitals available where the best services may be had without cost. These may be municipal or university controlled. Some thrifty persons avail themselves of such services by parking their limousines and colored chauffeurs and fur coats around the corner and walking into the clinic door. They often forget to take off their diamonds or if they do the mark of the rings show as white lines and besides they cannot take off their permanents nor the odor of prosperity. These people are of course bandits, stealing from the service medicine tries to give to the unfortunate.

For those economically in between there is this advice. The most costly is not always the best. Most cases can be managed by the family doctor at home. The safest place to have a baby statistics show is in the home. If a hospital is needed, select such quarters as suit your ability to pay. There is no disgrace in thinking of these things beforehand. If an operation is needed, unless the surgeon is known to you, find out what the cost will be. Unhappily I must write this because not all surgeons temper their wind to the shorn lamb, too often they consider only the amount of wool the lamb they are about to shear possesses.

The difficulty is in so many cases those who push a wheelbarrow when they are well call a limousine when they go to the hospital. On the other hand

both hospital and doctor too often forget the common fellowship of man which is the spirit of the profession of healing the sick. Same old story, we know what we should do but we do not do it.

IV

The foregoing is a brief outline of what the science of medicine has to offer the individual sick person and how to secure it, and the effort the profession has made and is making to make it ever more efficient. The spirit is willing, at least in spots, but our heads are weak, in whole or in part.

Those responsible for hospitals realize that we have been caught in a current which has taken us too fast and too far. For the wealthy of course the highest class hospitals are available. In fact the first class hospitals are so built that they can offer their patients all the conveniences and extravagances to which they are accustomed at home. This results in one of the greatest burdens those who have the responsibility of treating the sick have to carry. It is due to the visionary concept of those who provide the money. Everything is designed to meet the level of a life of luxury. They build hospitals and then go their way self-satisfied with their handiwork. Their ignorance and the architect's advantage work together—the more the cost the more the percentage adds up. Marble palaces are not necessary and add nothing whatever to the efficiency of the service rendered therein. It is possible to construct simple hospitals for simple people but the wise boys lay down specifications for what must be a recognized institution. They are invariably city folks with city ideas, if any. That it is possible to be sick in overalls or a calico dress is to them unknown. But a few have had the courage to tell these meddlers just what they can do, or go to, and it works very well, particularly in rural communities

with stable population who go to their hospital because they like the doctor to whom they are known, and have found the hospital service dependable. The sensible solution of course would be to allow us simple country folk to build hospitals according to our needs. The city folks with our permission could build anything they wished. Unfortunately now the western limit of recognized intelligence is the Allegheny Mountains with a bright spot on the Great Lakes.

It cannot be too strongly emphasized that the air nowadays is odoriferous with the laments of high-brows who wail because there are so many persons who do not have adequate medical care; persons ignorant of what constitutes adequate medical care. These peculiar sounds emanate from the chronic meddlers, persons ignorant of the requirements for caring for the sick but who wish to dictate what is to constitute adequate medical care. This interference increases the cost of care enormously without any return to anyone except to inflate the ego of those who dictate, and their ego is already inflated to a maximum degree. A lot of people know of no use for marble except to make tombstones out of and a marble lined lobby is lost on them. Those who live in palaces naturally want to be sick in structures likewise so constructed. But that has nothing whatever to do with the determining of the adequacy of medical care. There is only one test of the adequacy of medical care, the ability of the doctor. Hospitals can be standardized, medical ability cannot.

Just now the merchandizing of medical talent is in a dilemma. With medical education what it is today the public can now say that a young man who came to their community was amply capable of caring for the vast majority of patients from their first squawk to the final gasp. The fact that they were graduated from a first class university is a certificate of moral

character as well as the ability to render a minimum service. Of course they are all in the army now. What they will be when they return, no one knows. High hopes gone, nothing to do months without end, the star they saw has set. Can they awaken to a new day? We have been bombastically told that one third of the doctors now in service will never be allowed to return to private practice. Which third and who will do the selecting? The assurance that every individual is assured life, liberty and the pursuit of happiness by that optimistic document called the Constitution of the United States has been nullified by the New Deal. He can be sent out to get himself shot without due process of law and his liberty and happiness of himself and his family is in harmony with the new unwritten constitution.

Of course we can hope, that is all we have left, that some of the young doctors will return and will again take up their work in the wide open spaces. Then the people can turn to them for nearly all their needs. Babies can be had then for as low as \$25 each with the assurance that they are in the safest hands in the world. But all that is an old man's dream, viewing a day that has been.

Political democracy has been replaced by a personally conducted communism. So says W. M. Kiplinger in "Washington is Like That" and he lives where it was all brought about and therefore he should be in a position to know. Moreover no one has disputed his classification.

V

We doctors are bewildered, we see the structure we have builded threatened by an ominous omnipotent power. Our dearly bought achievements are being confiscated for political ends. The Government insists it has taken the place of God, the God of

Moses of old and it instructs us to sit down until we get our orders and if one protests they say the vengeful God still rules. We never had any luck praying to the God of Moses and any supplication directed at our Government seems even more futile. The Government can do everything and it looks as if it will have everything to do.

Government control of hospitals and all medical care seems in the offing. The enormity of the task of course is not realized by those who are leading us to no one knows where. It cannot be too strenuously emphasized that the value of medical care bears no relation whatever to its cost. If a man sallies forth to buy a hat (man's) he can be assured that the merchandise handed him will in a measure correspond to the price paid. Not so with medical care.

Time was when government hospitals were as sensibly built as were private hospitals, adequate for the need of prince or pauper. But now since what the Government undertakes does not cost anything the matter is different. One can tell this by inspecting the veterans' hospitals constructed in the past 20 years. Vast costs without reason, or at least without reasons to be discussed outside of the private quarters of politicians. I know of a vast hospital which after it was completed it was discovered that there had been no provision made for feeding the patients, no kitchen, no nothing. Obviously the hospital was built not for the care of the sick but for the benefit of the master politician in whose town (whose town is no misprint) the hospital was built.

Though the above is an extreme case yet there is no escaping the fact that government hospitals are built for the benefit of those who built them, the care of the patient is purely incidental. Hospitals costing millions which care for a few hundred patients can

be nothing but structures built for the benefit of those who built them. The results must be immediate, the upkeep is the problem of future generations.

In some countries hospitals are controlled by the government and the results are adequate care can be had at a minimum cost. As noted before in these the hospitals control both the service and the patient but the service rendered, while adequate for those requiring public care, would horrify those concerned with adequate medical care. So intense is this concern for maximum extraneous service they feel that possibly in the dim future they may be reduced to the point where they must seek public service. It is possible that this state may come about because those fool enough to labor to provide the pyrotechnics for the idle are being rapidly eliminated. It is this situation that must give concern when they contemplate the upkeep of the hospitals built by the government.

VI

We here could look at government control of care of the sick with equanimity if we had a government possessed of a desire to render public service. If or when the government takes over the care of the sick a cabinet position will need to be created; this has already been proposed. The cabinet appointment would naturally go to the professor of Semitic languages and literature, or Sanskrit, in Podunk University. He naturally would be an adherent of the Christian Science faith, it being of course neither. This preparation would make it possible to assume his task with an open mind. Having an open mind is a necessary adjunct for adequate service, as open in fact as a farmer's gilt, that is high school for swine. Each state would naturally require a hospital head. National committeemen naturally have the required qualifications. It was a specimen of this genus homo

who built the kitchenless hospital above referred to. Therefore what I write is no idle dream on my part though it obviously was on the part of those who built that hospital.

In order that the state superior might approach his task without prejudice a person from one state would be appointed to head the hospital in another state. Kansas of course would be assigned a committeeman from one of the Eastern states in which, by reading the tombstones, one gets the impression that the community was once inhabited by persons who spoke the English language.

Judging from the past the hospital staff might be almost anything. The superintendent might be under obligations. I know of one instance in which an attendant at such a hospital operated on the politician who appointed him. The doctor selected to operate on him represented a different specialty than the one called for. It would seem no intelligent man would select a bookkeeper to pronounce his funeral sermon. The patient lived twelve hours. I call that retribution. True, some government appointed doctors are competent. Dice have spots on all sides and it is not possible to throw a complete blank but it seems that what they add up is what determines the ultimate destiny of the many.

Some hospitals have very competent men who have held their positions for many years. It is interesting to note the nature of the hospitals so staffed. These it must be noted are chiefly mental hospitals where politicians would hesitate to accept appointment lest they be confused with the inmates and their identity lost at the termination of their term of office. This and the fact that the salary is low may have something to do with the permanency of the appointment of competent men. Be this as it may this must

be put down as an instance in which a public is competently served.

Then some fundamental factors are found operative in many public and church hospitals. Wholly competent hospital heads may be serving for a salary below the needs of the controlling politicians. This hopeful fact turns to despair when one notes that many municipal hospitals are the tools of politicians.

When it is necessary that the public demand sufficient service there seems to be a way of bringing it about. This as seen in our postal system is a model of efficiency of which we are all proud. Of course the national head and local heads need never have had experience so much as licking a single stamp. For them it is: Praise the Machine and pass the gravy. Unsung heroes do the work. Even our highest brows and most bulging foreheads take the precaution to hire a competent chauffeur when they amble forth to regale the public by exhibiting their grandeur. The important thing is that it works, in both instances.

When we consider the efficiency of the FBI we see that it is possible to achieve the highest service within the government. But when one reflects that nothing so efficient has ever existed before one lacks hope it might happen to a hospital system. Also here again, as in the case of superintendents above noted, the salary paid, in terms of political rewards, is relatively small. To make a public target of oneself for a fixed salary, particularly for those making an ample background for the marksmanship of the criminals is indeed heroic.

Herein may be a hope. The FBI is not interfered with because that organization controlled the crime of kidnapping which scared everybody. Perhaps after the government finds the efficiency of the doctors has been impaired by the overlordship of government bu-

reaucracy they may return a measure of autonomy to the medical profession, having in mind their need for competence when they have their next bellyache, a language even a politician understands. The bombast calls for the intelligent when he is frightened, that is if he has sense enough to know that he has entered a dangerous zone.

VII

Of course the foregoing is mere speculation. The government can of course do anything. At least it can start anything. In fact it has started a lot of things already. Like building palaces for the care of pains which developed while encased in overalls or cotton dresses. How to stop things once started is the problem of today in fields far wider than treatment of the sick. What will happen to the medical profession and the science of medicine it is revealing no secret to say, deeply concerns us all. We fear the worst and can visualize it, but only a youthful vision can hope; for the rest there is only the resignation of despair.

It is cheering to note that there have been some eminent men at the head of the government medical service dating between Sternberg and Parran, and some even before that. The vast Department of Public Health is government controlled. It is the salvation of civilization. The Department of Public Health, the Post Office, the FBI are hopeful examples. I recently asked a cattleman friend what he would do for feed if it did not rain soon. He replied that it had to rain, or else. So we may view the government controlled hospitals. They must show undreamed of efficiency, or else.

We are told that one third of the men in service will never be freed. This reminds one of the bride who indignantly replied, when informed by the bank

that her account was overdrawn, that she still had a lot of blank checks friend husband had given her. Sure one third of the present supply will be retained but the renewal of the supply must be considered. This third prepared themselves for a life career that did not anticipate permanent service to politicians.

The making of new doctors is entrusted to salaried people. Fixed salary, permanent position, does not compel them to be considerate of their patients which would be necessary if their bread depended on being decent. It hardly needs to be mentioned that one of the greatest stimuli in private practice is the fact that unless he treats his patients like human beings and renders service he just will not eat. Not noble in concept perhaps but the results are good.

On the other hand public school teachers are our most useful people covering the widest range. They are confidently expected to make poets, even doctors, out of morons, make exemplary citizens out of crooks in one generation, and all other desired things, at a stipend much less than a bricklayer receives.

There are other factors connected with the medical profession which is beyond the ken of the politician. Medical research is conducted largely by universities and privately endowed institutions. The question is can we hope for their continued integrity when the politician takes charge of us. Research nowadays involves expense that cannot be met by the private individual. Yet the intelligence required to use these resources may come from anywhere. For instance Koch and Banting brought ideas and glorified the universities they later served. It is hard to grow enthusiastic about the possibility of their being received and provided for after politicians take over. On the other hand heads of institutions sometimes suppress budding ideas. For instance I know of one young

man who had ideas on the process of wound healing. The head of a great institution turned him down, categorically exclaiming it was all nonsense. The only place to study the formation of connective tissue was in the embryo, he being an embryologist. He ignored the very obvious fact that wounds do heal in adults. Thus it comes that the good and powerful may hinder and suppress. In fact throughout history new ideas have been suppressed by those who did not understand. I need only mention Galileo and Semmelweis elsewhere mentioned.

Granted advances have come because some individual has an inspired imagination. Most great ideas have been born to free men. I have shown this in the life of men who have revolutionized medicine. Political control of hospitals would mean an end to mental freedom. A salaried position means two things: economic freedom at the expense of a 40-hour week labor return. It would mean that young men would be under a higher up. If he got an idea would he be allowed to follow it up to see to where it leads? Even in universities, where large brains congregate, many bright ideas have died aborning, as noted above.

In a nonprofessionally controlled hospital it would depend, it would just depend. The other side of the picture allows us to see the benefits of security a salaried position affords. Many of the ideas are originated in salaried brains. One must not forget that these salaried brains were selected because they had promise of doing just that very thing. Of course many promising young researchers turn out to be wet fire-crackers once they secure their position. A university head once told me the troubles of heading a university. He said he was compelled to bet that a colt would turn out to be a winner. One cannot wait to see if they will be winners for by that time they

will have been absorbed by some other racing stable. Yet we must realize that a university head is the most competent person to place the bet.

Another real fear for the hospital system when it is politically controlled is the very shifting of our political system. It lacks the permanency and leadership found in universities and institutes for research. On the other hand our postal system survives the changes but those who do the real work are permanent. We have no fear that the country at war will discharge Generals McArthur and Eisenhower.

As already hinted at there is yet another possibility which may be encountered when politics takes over the job of providing adequate medical care for everybody. It will require unlimited funds and there may ultimately be a limit. Every politician with the grandiose ideas of adequate medical care should study the operation of the modern dairy. The milking machine is a marvel of efficiency. It takes the milk away from the cow without effort, either on the part of the can or milker, pleasantly and quickly. But if one goes around in front of the animal he will see a man feeding it. That means providing the feed and handing it over to the bovine intermediary between the feeder and the milking machine. To the uninitiated it looks as if the governmental efficiency depends on keeping the remuneration for those doing the work too low to attract politicians.

The mere fact that all doctors would be on a salary does not frighten me. I have often envied the salaried man. When he is sick he can stay abed until he feels better or the curiosity about something overcomes his inertia. He has a regular vacation so that he can go out and do something that will make him tired. Then old age pension removes the necessity for

thinking beyond the next salary check. I can envision a life serene and unchanged until the mortician demands a hearing.

Just how the government control will affect the doctor is his chief concern. He has done much to bring on the predicament which faces him. His education has cost him much and he envisages a quick return. He figures his professional charges according to his investment rather than the service rendered the patient. He envisages older men who have feathered their own nests and he likes the looks of the downy bed. The income he demands at once must be adequate to meet the increased expense of friend wife and yet be able to lay by enough to make glad the heart of the bond salesman or a future son-in-law. In this glorified picture he is apt to overlook the fact that the doctor's only asset is the friendship of his patient and this must be based on service rendered.

Now the doctors have independence. He likes this independence and he proposes to keep it, even when the phone rings at inconvenient hours. He can go where and whither he wishes, based of course on domestic agreement. He does not want to give up this state and work for a fixed salary, fixed hours and the danger of meeting the displeasure of the board who hires him at a time of life when he cannot hope for reemployment other than as flagman at a railway crossing. This prospect is not pleasing. This is the prospect as the doctor looks at the impending doom from a purely selfish point of view. Salaried people in many instances are provided with old age pensions. Many doctors reach old age without adequate provision for a period of inactivity. His independence may leave him dependent if disease and old age overtake him. Nothing is sadder than an old doctor who is compelled to work long past the period of his

maximum efficiency, in order to eat. Obviously state medicine will be of advantage to certain types of doctors, even though they may oppose it in their younger hopeful years.

The fact is the doctor of today has become too expensive to meet the requirements of the small wage earner, partly because of the nature of things, partly because he lacks understanding of the problems of his patients. The real problem ahead for both doctor and patient today is in a measure economic. The cost of medical care must be lessened to meet or to come within the range of the low earner. Cost and service are relative things. The relationship is much disjointed because the low and moderate wage earner represent different social problems. The low wage earner has his babies at home, figuratively speaking of course. The salaried man represents a different standard. In many cases the party who does the actual labor for the salaried man may be the daughter of the employer. Though the father may have been produced at a cost of ten dollars, the daughter has circulated in a different environment which necessitates a net cost of a thousand dollars. The solution is that the doctor must come to realize anew that he has elected a profession. If he has but an eye for the gross income he had better become a politician, a bond salesman, or go the whole way and become a bandit. To each of these the world owes a living. It is easy for the modern doctor to unconsciously classify himself with these gentry. There is a quite common belief among some doctors that his is the privilege to charge all the traffic will bear. Too often when all the facts are bared it will be found that he charged much more.

VII

To anyone whose experience enables him to see

the problems of doctor and patient whole it is obvious that an understanding can be reached by a frank discussion. Doctors must be more conscious of just plain professional understanding and hospital charges, some of them at least, must be brought within the range of the salaried man. Only doctors and hospital officials should be admitted to such a conference.

This idea is not new. A committee in Boston considered what the cost to the patient should be for middle class folks. After deliberating eight years they concluded that hospital rooms should be four dollars a day and no operation should be more than one hundred and fifty dollars. This is possible if the hospital is built with the idea of rendering first class service at a minimum cost. This is no idle dream. I know a doctor who demonstrated this possibility starting in 1902. With a six-room hospital it has grown to 200 rooms and these figures have never been exceeded.

Between the government control of medicine and the monopolizing by the clergy of salvation there is a vast deal of human suffering. The sociologists have furnished blueprints for the procedure but there are no building materials suitable for building the structure because the material they call for is largely composed of superheated atmosphere and we have found that wind blows where it listeth and when it gets through listing we have only a bare spot, barely identified as the site where we had planned to erect our building.

Dr. Logan Clendening states the dilemma: "In this day and age of plans for the future the sociologist might acquire a bit of wisdom from the medical practitioner: diagnosis is easy, treatment is difficult. The medical profession in its most humble practitioner can easily tell what is the matter with most

of his patients; how to treat the patient is often a problem. If the medical practitioner had a sure and easy way—a pellet of medicine to throw in his mouth or an injection to put in his veins—things might be simpler, but most people who are sick are sick because of their minds and bodies and environment and sense of frustration. To correct all these things is not a simple medical problem. When the great counsellors of the New Age sit around the table to correct the ills of the world, they probably will be well informed about the diagnosis, but what are they going to do about the treatment?"

The treatment indeed. The human is not made up of interchangeable parts. Each defect the machine develops must be repaired by handwork. This work requires experience. It cannot be obtained from books. People cannot tell the doctor where it hurts because it is not that kind of hurt. Only general situations can be recognized. A successful business man—likely it is the taxes; the mother—a son in service; a daughter—the boy friend got away, or maybe he did not—even the mother may be sharing the daughter's worries. Usually the patient remarks as an introduction that they want a general checkover, that they do not feel just right. It is impossible to consider all possibilities. The cost of making all the examinations would far exceed the value to the patient. The doctors' skill in ferreting out such problems is a matter of experience and inherent human understanding.

I have considered many of these causes of suffering in a previous book (*The Doctor and His Patients*). All that must be emphasized here is that the government control of us doctors will leave a large part of the need of the people unprovided for. The preceding chapters have been addressed to a study of the multiple causes of human suffering. Jealousy and

hate cause more suffering than all other causes combined. These afflictions cannot be cured in hospitals. They can be eliminated only by prophylactic measures. We doctors are specialists in the control and prevention of human suffering. Our obligation takes us far beyond the curriculum of the medical school.

IX

The relation of doctors and the public may be changed when this present conflict is ended. Though doctors have offered unselfish and courageous service in all wars the relation has never been as close as in this conflict. The reason is the doctors are in a position to offer better service. When this war is ended the soldier's experience may cause them to restrain those agencies which know all about adequate medical care and how to pen up the doctors. Soldier and doctor who meet in a shell hole will understand how adequate service can be rendered under very primitive conditions. The essential thing in providing adequate medical care is the presence of a qualified doctor with the courage to render his best. We read about the distressed seeking comfort in prayer but the pictures they send back from the front show a doctor injecting the plasma you sent along, or tying up a hurt. The doctor is there in person. Don't miss this point. The soldier boy will not forget.

Harking back to the first paragraph of this chapter one may say of the scientist of the future he must face it with fighting courage, both disease and science's detractors. It will depend on circumstances whether he will be branded a traitor, an Arnold, or will be recognized as a fighting Sheridan. That is the picture that confronts us doctors.

We may hope that when our soldier boys return they may have a voice. They may have tired of dic-

tators. Perhaps the assigning of doctors to servitude for the rest of their lives by a wave of the pen and a blast of His voice may be subject to revision. Perhaps they will believe that in matters of disease doctors are the most competent to guide the nation. We all have seen the result when a few persons shall say who shall live and who shall die. The result of the holocaust which engulfs us may cause a new vote to be taken. Shall we follow the God of Moses or shall we listen to the God of science?

I will close this chapter with a quotation from Geer: "Take the ambulances and the doctors away from us, and you won't have any fighting men who will fight. Green troops might make one attack without the medical services behind them, but that's all. Just one." Our soldiers should know. Never in any previous war have ambulances and doctors been so near the troops in action. The God of science has moved up.

CHAPTER XVI

FROM MYTHOLOGY TO SLACKS IN THE EDUCATION FOR DEATH

The choice of this chapter heading is not made with the idea of being facetious. It involves a matter of the greatest gravity. It includes the history from the beginning of the mythology from which has evolved the Jewish history which is our Bible, down to the scene at the railway station this very evening. Soldier trains disappearing in a cloud of smoke, the slack-clad girl, arms stretched in wordless despair, a despair she feels but does not understand.

Sometimes events in history require centuries to run their course. Sometimes it is enacted in a single generation. We have side by side the Dark Ages, and the Hitler regime in Germany. Unspeakable cruelty. It may be profitable to analyze the short event in order to see if we can find the key to the act of the centuries. We hope that the acts of a generation will soon be conquered, but the dark ages are still with us. The basis of both is hate.

I

We started with flowing robes, and whiskers, to achieve a civilization. He have succeeded to a considerable degree by heeding the voice of conscience, but we have suppressed the picture of the mother and the babe which the Egyptians gave us, and are again rehearsing the acts of a savage race. Now the veneer has come off and we find ourselves near the pre-Canaanite savage state when only extermination of our neighbors will satisfy. After the preCanaanite state, came the period when the females were spared. Neighboring peoples have been enslaved when our enemy does it. In the last war we established protectorates over weaker nations. That is civilization to

date. To protect the weaker nations from their protectors seems to be the first order in establishing justice.

We are confronted with the summation of the facts of history which shows that organizations have dominated the efforts of the noblest characters of all time. Suppression has been the tool of organization. We need first of all to study the basic factors which dominated the agencies which underlie the atrocities of the Dark Ages. History records that we started with phallic worship, mythological in concept, real in practice; history records vulgarity that should have been eliminated millenniums ago. Yet they are with us blossomed afresh from the stimulus of our present calamity. Shorts and slacks are the emblem of the dancing about the same throne in its modern dress, imbued by instinct with all the knowledge that a reading of Exodus vii might have taught them. Certain events still revivify instincts which were once declared to be the product of inspired persons.

The price of keeping alive those elemental instincts is now apparent. The debt we must pay now. What civilization has achieved lies on the brink of ruin, a ruin brought about by the perfidy of those who have guided us. Certainly I have no desire to call up the events of the past but it is necessary to call attention to the very obvious fact that we all had the intelligence to understand the fallacy of the teachings but complacently drank the soporific that was handed us. We were taught to like it in our childhood or were compelled to bow to its dictates in our maturity. A new order must come. He is a coward who refuses to see the truth and fails to contribute his mite to the bringing of a new order.

Time was when mythological beliefs were more or less innocent diversions. The elemental instincts were cultivated and proclaimed in poetry and song. That

our baser instincts could be suppressed to elevate us even to the level of the lower animals never occurred to those who were in an inspired state.

There was no urge to seek a higher plan. They were really dumb but did not know it. They were playing with imagination, trying to figure out the whence and wherefore much as we are doing today. It was the play of imagination which was handed to an ignorant people. The flowing robes and whiskers backed by an attitude of self complacent conceit naturally impressed those who viewed the scenery. They thought they were something inspired. But in their inspired periods they discovered only the joys of wine, women and song. When they tired of this triad they discovered the joy of loitering on the banks by the still water. If there is anything more vulgar than the songs of Solomon, happily I have escaped the notice of it. We try to make of this discovery a guide to noble achievement.

Modern civilization envisages a higher state and in achieving it is growing away from the vulgar mess. But the tendency is opposed by influences which profit by continuation of the old Mosaic teaching. This education is designed to educate for mediocrity because only in the maintenance of mediocrity can the old order be perpetuated. We are suddenly confronted with the fact that we were educated to trust in powers powerless to protect us. We have discovered that we must be reeducated for death. Of course those who guided us did not think it would turn out that way. They sought only to educate us thus in order to hold in line the people for a definite purpose which collectively speaking is for service to that for which they have educated us. Obviously events aplenty in history are recorded which should have made the folly of this course clear to us. We closed our eyes to truth, dreamed only of the advantages of keep-

ing ourselves in harmony with this dominating influence. Now our boys are being prepared to travel to the four corners of the globe in the name of liberty. The fact is they are offering their lives to protect our indolent hides here at home. Here at home is where the battle for liberty must be waged.

Heretofore the result of our education for death has had a few unpleasant sideshows in which extermination in most instances was limited to thousands. The results were minor because of a lack of equipment. How vastly our position has been complicated is evidenced by comparing the recent battle in North Africa with the battle of Zama, Africa, 202 B.C. Between those battles lies the vast achievement of science. What was designed for the benefit of civilization is being diverted for its destruction. It has been dislocated by hate because of the refusal to see the truth because of the teaching of things that never happened. Prove to a conceited person that he is wrong and he gets mad—that is he hates. A war is but the accumulation of hates.

Things are really becoming progressively more serious as we view the future in the light of experiences of the past. When we compare our Revolution, our Civil War and World War I with the present conflict it is seen to be a matter of geometric progression. It must be evident to every intelligent person that the next global war will mean the extermination of what we are now pleased to call Christian civilization. We must either banish the old education for the benefit of organizations and build anew, based on facts, or we will be destroyed. The problem is now to establish a diagnosis to determine why we have done as we did. Having determined this we can proceed to develop a prevention, prophylaxis.

We are wont to regard the mythological period as terminating at the time of Moses when he established

mythology and called the inspired truth as it was developed through the Old Testament and presented the genesis of his God. As noted elsewhere some strange change happened at Matthew 1:1. Mythology became decent and presented us with the Jesus concept but it certainly did not see its end. This is obvious when we consider its modern manifestations as taught today. We are riding the old mythological chariot pellmell down the road of civilization crying that the old order must be maintained. God told it to Moses. Even now there is no going back on that. We have built our beliefs on his hand-made God; but to continue our hate will not save us from the wrath of the civilization which has developed since we have discovered that woman is or has become something nobler than a female chattel.

How deeply we are steeped in the vulgar teaching is made evident when we consider the teachings of the New Testament with its many fine things contained in the Sermon on the Mount, admonition of gentleness, the love of children, the nobility of toil, all went for naught. Paul reasserted the old domination of the subservience of woman; the idea was so popular that it captured the world and still dominates us, and is the elemental factor that has brought us to disaster. We have escaped it in large measure as we rescued woman and educated our children morally for life. We suddenly find we must educate the children for death; not to lie beside still waters, pleasantly dreaming.

The old mythologies were the product of active minds but they had no facts. There was from the dawn of human intelligence some urge to nobler things. The old mythology knew nothing from their own experience but how to reproduce. It was inevitable that they should join the two with the result that their worship was phallic, to which we still ad-

here. Teaching the same mythology now is due not to the lack of facts but a studied effort to total blinding to truth that is everywhere available. Is there any intelligent person today who can picture an anthropomorphic God sitting on a throne who came down to a mountain and handed Moses some tablets? Yet we teach this to our children. It is easier to sell a child possessed of a nickel an ice cream cone than to interest it in learning the elements of arithmetic.

II

The problem of this chapter is an attempt to use the knowledge of today to explain why this refusal to see the truth by those who gain by ignoring the truth. We must try to determine what is lost or gained by perpetuating things obviously not true. Just now is a favorable time to study the results of our folly in following the teaching of complacent conceit and ignorance. Even in the last few decades what we pleasantly regarded as the low rumbling which promised a gentle rain which would replenish the still waters turned out to be the cannon's roar.

It can be only a matter of natural humiliation now to recognize that we had to be duped into doing the only thing that would save us. An appeal to reason, obviously, was useless. What would be our situation if the President of our democracy had not done the most undemocratic act in history? Congressmen, influenced by the alleged votes controlled by the churches, brought us to the state which made his acts mandatory. Suppose the President had said "I am going to draft all of you between the ages of 18 and 38, or 60, men and women alike, and send you to the four corners of the earth to save our hides. I shall designate this the cause of liberty. The nation must lay all its resources on the altar of blood to neutralize the stupidity of all of us."

This deception was necessary because an appeal to our reason would have been in vain. We would have realized that it meant a reeducation for death.

Unhappily the President also slept, the more abundant life, a shovel for everyone to lean on was his gentle croon, all planned in advance. The urge to get something for nothing caused us to turn our hands palms up to receive the more abundant life. The bandit has the same idea but to make it legal it must be done en masse, that is it must have political sanction. All this is but a civilized version of gentle singing by the still water. We are all submerged in thankfulness that he did awake. Perish the thought but was he waked up by a gentle whisper in his ear from those whose need was even more urgent than our own?

We slept, not because we were dumb but because we shared in a quite respectable way the joyous triad the whiskered boys taught us. The question is who profited by keeping us dumb? The churches and politicians chiefly but we were all apt pupils. To keep the mind at a low level is of use to the goldbrick salesman and his ilk and to all those who have a useless article to sell.

We need to list all those who profited by our mis-education in order that preventive measures may be applied before we again reach a state of dire need. That our teaching is basically wrong is evidenced by the fact that it is impossible to believe in the protecting influence of the God of Moses and the salvation of Paul and at the same time build airplanes with any degree of enthusiasm. Next to the urge to eat and reproduce is the desire to acquire something for nothing.

We do not need to abandon our belief in God but we do need a new model, a God who tells us he pro-

fects those who protect themselves, the God of the universe. Homer Lea, Mitchell and Lindbergh were emissaries of this God. We slapped them down. Nothing is more painful than the truth when we do not want to hear it. The alarm clock is an undesirable article before the break of day.

III

The summary of the preceding remarks forces us to conclude that keeping the child mind within the range of mythological concepts demands a low intelligence or education that must begin before the age of reason. It is only within this range is it possible to impress indelibly on his mind that to ask a question is the unpardonable sin. That in itself is a selfish act, to brag about it makes it contemptible. It is like giving a child whiskey, as I have known mothers to do in order to keep it quiet so that the dance may go on.

Of course the fixing of belief in the child is designed only to bind the child to the church. In ex-cathedral lines he can develop as he wishes, even to following the dictates of his own conscience, as is perfectly obvious by comparing those so taught with others not so influenced. Let it be repeated that to make the teachings of the church palatable they must be fed to infants; the fact is made obvious because adults will have none of it. The child must be imbued with a belief in sin and soul salvation and belief that prayer to the God Moses will save us.

Lives there a soul so dead to love for his child that he can tell a child of four that he was born in sin and that he must repent or go to hell? My parents did not tell me this. It was the visiting clergyman who did it. It startled me. I had never heard the word. Why didn't the clergy teach that Jesus asked the children to come to him and that he taught them

kindness and goodness, goodwill to all mankind and they need not acquire a firsthand knowledge of sin?

Churches must find some way whereby they can perpetuate themselves by substituting fact for the mythology of ignorance, truth for deliberate myth, character based on conscience for belief and thus make it palatable to adult minds. They could, or could have, done this had they acknowledged the truth, in the period of ignorance, and sought only truth. They long ago would have realized, as they do now, that civilization demands a good God, as they now try to construct. No man can serve two masters.

IV

When I was a child there was a curious document called the Constitution of the United States. It said we are a democracy which guaranteed "Life, liberty and the pursuit of happiness." We just drummed along without thinking much about it. We thought it was a permanent document. On this assumption our children were educated for the more abundant life, whatever that is. We must find out what came of it. We neglected to teach them that each of us must do our part to guard it.

Because of this neglect came the explosion. We were removed from it, or it from us, by edict, our liberty and goods confiscated and our boys sent to foreign service, no one knows where and most cruel of all, some to end up in a prison camp or "missing," then months of parental agony long after the facts are known but withheld indefinitely because of military necessity. Here is a picture from my casebook. Farmer, aged 65 years, large farm, stock, implements, one son dead in North Africa, one "reported missing," the hope that he may be a prisoner—what a hope! Now his last son, a 'teen age boy is drafted. This father comes to the clinic because he thinks he

has heart disease because he is having difficulty in breathing. He was properly educated in a just God. His heart complaint recorded in the clinic as functional, due to grief, he exclaimed, "My God, we are going to hell." I asked, "Did you ever stop to think that the hell we have is of our own making?" I shall not record his comment, professional communication. That is to say one can tell a doctor anything and he will not tell your preacher.

We are a Christian nation and to prove it we vow that we shall show the German people that Hitler's education for death does not pay, but we have been compelled to use his technic in order to achieve it. He educated the children of Germans in hate, for death, from their earliest childhood. The idea he got from us but he beat us at our own game. He built tools to make hate effective.

Our reeducation for hate is made somewhat easier in that we have been taught in our childhood an abstract hate for the church across the way as a necessary defense of our own.

That our returning boys should demand liberty should inspire churchmen to take stock of their education for ignorance, lest their feet be caught in the undertow. We must face some unpleasant facts: Churchless Russia has saved us from fighting for liberty on our own shores. We see that Russia herself educated for death because she had the foresight to see the impending disaster if she did not do so. She did it by manufacturing her own iron for her own defense, and said nothing, as shown in a recent book by John Scott. They faced the truth, and depended upon their own energies stimulated by a desire to defend their own country from threatening predatory animals. (One may add in parenthesis that they did not feed their iron to wild ani-

mals to be vomited back over them now. It is related that a soldier in a fox hole when a cannon ball passed over his head said: "There goes Grandma's old cook stove.")

The city in which the Russians built the implements of defense has not a single church. That the obliteration of the church was a mistake is now realized. The point is churches can and should exist, but they should not obscure the world of reality, that arms for defense is our first duty. If we cannot save our skins our souls will flee. The place for the church is to inspire to nobler thoughts. For defensive purpose they have proved to be useless.

V

All churches educate for ignorance. There are various ways of keeping the truth from children. A recent book by Desjardins gives the results of a questionnaire placed before 4,640 children from the fourth to the ninth grades. The title, "What Boys and Girls are Asking" is deceptive; boys and girls are not asking, they are being told. A sample is: "Does God love those who do not worship Him?" Sixty eight per cent thought Yes, 20 per cent No, and ten per cent did not know. This book asserts that God loves. Of course the answers of the children in formulating their answers were devoid of fact because the basis is pure assumption, that God loves. The entire book is based on false premises, on Yes or No answers impossible to give. The entire book is obviously subtly designed to keep children in line for the church by assuming as truth things that are without basis of fact, most of them very definitely disproved. Children would be better off if they were taught that the universe is quite a place, full of a lot of beautiful things. Yet people wonder why children so commonly avoid the Sunday School after puberty.

There is an even worse book by Eugene F. Marshall, D.D., which is made up of questions and answers. The first question: "What is the most important of all sciences? Answer: The science of religion is the most important of all sciences." If there is a single fact in the entire book, it escaped me. It is a deliberate attempt to fill the child mind with things that never happened. The book assumes that things that are not true can be added after an individual is old enough to read.

VI

Let no one judge the statements in this chapter who has not acquainted himself with the contents of these books. They gave the answer to the question, why it was necessary to reeducate our children for death.

In contrast to this education for death, take a look at education for life. We doctors have shown what it means. The excellent medical care our soldiers are receiving is a matter of prideful comment. Would any parent prefer that his son lying wounded on the battlefield be under the professional care of Dr. Luke rather than a modern doctor trained to preserve life? There is the picture; the worshipers of the God of Moses have not changed, they still teach hate; the God of truth has traveled far and is moving at a rapid rate today, he is injecting plasma into your boys' veins at this very moment.

The problem of the doctor now is how to keep people alive, not in the abstract discussion of whether it is possible to restore life once it has fled. Note this: in modern battles there has been a mortality of only two per cent of the wounded compared with sixty per cent in the Civil War. The God of science brought this about. Infectious diseases are no more, the God of science made the laws that made this possible.

That medical men are ready to distribute the benefit of their knowledge is evidenced by the fact that the mortality among medical men is highest among officers. They were educated for life it is true. They did not know that they must some day be reeducated for death when they enrolled in medical school. They believed their education was to fit themselves for the saving of life, not to sacrifice their own for the exigency of the education for death. But from the nature of their training they of all men would most readily adapt themselves to the new role.

Since I have noted that the casualties are highest among medical men it is mandatory that I mention the fact that the mortality is lowest among clergy and Congressmen. This knowledge makes it possible for the young who seek education to their liking to choose safety or service.

Just imagine what would be the state if Mr. McTapp when he demanded the mobilization of 40,000 doctors, had also demanded the mobilization of the same number of clergy and Congressmen. He tells us that one third of the doctors inducted into service will never be released. Life spared, liberty gone by edict and happiness only so much as a prisoner can extract. In his haste he read only a part of the preamble to the Bill of Rights. All men are created equal, he reads. This he interprets to mean that all men and their wives being created equal they are equally subject to induction. In this only are they equal. That is the new democracy. Now life drafted, "liberty and the pursuit of happiness" is covered by his thumb.

Happily other things besides the currency may suffer deflation. Behold the king of beasts, the lion. He rests his chin on the ground, deflates his lungs and the earth trembles and the circumambient atmosphere is agitated; the antelope, wart hogs and zebras flee in

terror but the elephant and the buffalo regard him with derision. Even the giraffe from his height looks down on the bulging neck and chest and sees that it is only hair. But when the female of the species, the lioness, calls his bluff, he trembles and seeks out the solitude of the jungles like a defeated dictator, king only in his own imagination. Only the monkeys in the treetops retain their sense of humor and chatter in derision at the sight of the slinking king of beasts.

VII

We are taught to believe the validity of mythology because of the miracles recorded. A miracle is something the observer does not understand. The event may be perfectly simple to one who understands. I have seen all the miracles of mythology in the course of my clinical experience. I have them all written out in my case-book. Mention the miracle and I will read the counterpart as it occurred in Kansas.

That miracles are, or should be, things of the past is admitted by all well informed persons, biblical scholars as well as scientists. Those who still proclaim miracles as facts are either ignorant or have a personal reason for presenting them as truth. Behold the politician, he can perform miracles because he plans that way. If the plans worked it would indeed be a miracle because they run counter to human experience. It seems in order therefore to examine some of the events recorded as miracles, even proclaimed so today, in the light of present knowledge. No one I dare say is more competent to undertake the examination of miracles than professional miracle chasers, the modern doctor.

VIII

That the use of miracles in the education for death is not a thing of the past is made evident by a recent occurrence in our midst. It did in fact suggest the

addition of this chapter. The stupidity of this attempt is evidenced by the fact that it was printed in a journal of alumni of graduate nurses.

I quote from the journal as follows: "The speaker of the evening at the Nurses' Sodality was the Consultor General of the Passionists who spent from 1926 to 1940 in Europe, in Austria, Bavaria and Italy. He is much struck with Theresa Neumann, the stigmatic maiden of Konnersreuth, Bavaria. He was an eye witness to the phenomena, told about the famous Bavarian girl who is marked with the crucifixion wounds of Christ and suffers the agony of the Passion on almost every Friday of the year, all the while bleeding from her wounds. Theresa Neumann has taken neither food nor drink since 1926." We are told he ended his discourse with a prayer. I hope he prayed to his God to forgive him for springing this hoax on, of all people, the graduate nurse who feeds her patients three times a day.

That such things can be spewed within the walls of a modern hospital makes me sick; fanatic, mental aberration, human cussedness—I give it up. Most assuredly it is the survival of the idea of human sacrifice. It is done for the church. Such teaching is designed to perpetuate the semi-savage concept of thousands of years ago, events based, not on fact, but on the vote of the Nicaean-Constantinople Council hundreds of years after the events they misrepresent. Whatever the purpose it stays, or at least it is an attempt to stay, the advance of civilization.

To show the futility of such education we have but to turn the light of modern science on the facts concerning this allegedly marvelous young lady. We have to do here, not with a miracle, such as the snake conversation in the Garden of Eden, but a plain case of hysteria recognizable by any Junior Medical student.

The only miracle is that anyone should believe that it could excite anything but amazement.

We have here combined events which justify the wording of the title of the chapter, the same thing in the most ancient dress united with the most modern garb. To pass on the story of crucifixion and resurrection as fact on which to base modern life is untenable. The story sounded plausible to the inspired semisavage and it is plausible now only to those ignorant of basic facts involved, no matter what their degree of intelligence otherwise.

The facts of the case are not mysterious. That those who so teach may be ignorant of this fact may be true, but facts could easily be acquired. Only the psychology of persons making such statements is beyond our ken. Why are they made? No one ever lived 16 years without taking food, certainly nothing can be more obvious, and to tell it to a group of nurses, of all people, is the limit.

IX

Before examining in detail the modern miraculous achievements and events in the life of our heroine, Theresa Neumann, it is desirable to inquire into the process in education in childhood which makes it hold into adult life, to give our lecturer the audacity to present it to adults.

For purpose of study several groups suggest themselves: 1) the mentally substandard; 2) the mentally competent but in whom the early education dominates their lives; 3) mentally competent who retain the effect of their early training; 4) the fanatics; 5) mental aberration; 6) perpetuation of falsehoods.

1) In the lowest form of intelligence we can classify those as being possessed of a mind. The ability to talk, psychologists say, is evidence of possession of a mind. Curiously enough the ability to talk is accepted

as evidence that one has a mind, though the very act of talking may prove the contrary. The requirement is too high. The question whether a person shall be confined to an institution for feeble minded or be accorded full privilege of voting for Congressmen, and to reproduce his kind, devolves on the simple problem of whether or not he can take milk away from a cow. The margin is very narrow, depending largely on the disposition of the cow.

2) A large percentage of our citizens, intelligent enough for their work who never advance beyond the teaching of their childhood, resent any reference to their early teaching. These are susceptible to any suggestions of their intellectual superiors, easily fitted to the needs of politicians of all varieties. They have our profoundest respect.

3) The most perplexing group are those persons of intelligence who are so imbued with their teachings in childhood that it remains with them throughout life. The questioning of their early teaching is the unpardonable sin, and any chance remark referable to these teachings are angrily resented. This is not a question of native intelligence but the result of the deliberate limitation of education for a purpose, to which they have been subjected in their early childhood. They adhere to the teaching that the preservation of the church is of greater importance than the perpetuity of our nation. If one put the problem in this blunt way it would be resented of course but I know of what I write. It is this dislocation of the sense of responsibility that has made the reeducation of our youth so imperative. I have repeatedly offended able scientists by the discussion of simple problems of biogenesis and dietetics. It forms an utterly useless barrier between scientists.

It seems strange that there are those whose minds

can be closed at the age of six years to recognition of the mythological character of their teaching. This is true of all churches, in varying degree, and the sole beneficiary is the church. For instance a most intelligent friend tells me nothing will convince him that God did not hand Moses some tablets on a mountain. Yet in civil life he is an outstanding mining engineer. Another when jokingly asked about a matter of dietetics grew choleric and vehemently proclaimed that no one could deprive him of his religion. Yet among these men are the intellectual giants of the nation. I reckon many of them among my friends. Yet knowing the relation of these men to their church, any church, forms a definite line between us. We cannot form a common group imbued with a definite purpose. It makes clans, and a clan has, to say the least, a definite aversion to other clans. The pity of it is, nothing is gained by it. Or perhaps better stated the church gains a little but the common fellowship of man loses much.

Some men keep their adherence to a church separate from their life's work. Pasteur, one of the greatest of mankind, belonged to this class. He kept his scientific investigations entirely separate from his faith in immortality. When asked how he did it he did not get mad, he merely explained that he kept the two separate. Why should anyone accuse me of trying to take his religion from him when I casually remark that raising pigs is one of my hobbies?

4) Fanaticism. The next group comprises those who stoutly defend miracles as fact despite proof to the contrary is available. For instance one of my radio ministers regretfully admitted that prayer did not prevent war. His remedy was to pray three times a day, and louder. One would be disposed to class this attitude as that of a fanatic, but a milk-toast attitude of

mind cannot be associated with fanaticism. Fanatics believe what they proclaim. To brand a man a fanatic one must add the date when the diagnosis was made.

The arch fanatic of all history of course was Calvin. It was he who was responsible for the Huguenot wars, two million dead, nothing decided. The only result was a lasting hate which divided peoples then and which continues to do so down to this very day. No better example in history than the observation of the Bard of Avon, "The Evils men do live after them." It is still true today.

The advance of civilization has changed the complexion of everything. We must consider antecedents. My friend who got mad because I mentioned my nice pigs had never tried eating pork. One time some intelligent persons believed Galileo was about to upset the whole apple cart conveying all that was holy and righteous. They were not fanatics. It upset the miracle of the stopping of the sun in its orbit. We know now that they meant well but even so they were mistaken. Everyone now recognizes the fact that the moon moves—how else could one plant potatoes in the right phases of it. These men were not fanatics. There had been no evidence produced to indicate they were wrong. They were defending cherished beliefs. They had never tasted pork.

The great difficulty is that in so far as it pertains to religious belief the events of history change so slowly that no one generation can see the result of its own acts. It has been said that the majority is generally wrong, that the persecuted ones are right; right gives no protection to those in advance of their time, even though the feeling of being right is a sufficient compensation. History often reclassifies individuals. For instance we are now maneuvering

around so as to make it appear that we all these 400 years recognized Galileo as one of the greatest minds in history, because had it not been for him, Columbus never would have discovered US. Even this has its advantages. If we had stayed at home we all would be in Spain and would not now need convoys to carry us to where liberty must be rescued. Mitchell and Lindbergh were a minority of two. Now we are feverishly building airplanes and the majority now is right. We are scared now. After we have been saved from impending disaster we can go back to hating each other. We cannot do it now because it would reflect on our intelligence and upset our play-house. Later on after we have saved our faces we will build nice monuments to Mitchell and Lindbergh as an indication that we knew all the time that they were right and were a united people.

There are really only two classes of persons who have a real chance to get an education during their lifetime: ball players and surgeons. If either of these, even the most skillful doing his best, makes a false play, he himself and everyone else knows it at once. It is not necessary to wait for little Willie to discover that Grandpa overthrew second base and lost the ball game, or that an ancient sire removed an appendix and the patient died of a perforated ulcer. There never will develop miracles in either baseball or surgery.

5) Mental Aberrations. By mental aberrations we mean that there is a disassociation of ideas. It means a permanent delusion of something that never happened. In contrast delusions may be temporary. For instance love is said to be a psychosis which recovers spontaneously in six months. The old revivalists used to scare the drunks onto the water wagon but they fell off of it at the next crossing. These facetious remarks are interpolated to relieve the shock that is

to come. The history of religions which have changed the course of civilization had their inception in definite mental aberrations, now definitely recognized as such. These are terrible truths but we must recognize them now if we would escape the dilemma in which we find ourselves. Paul believed that he saw the resurrected Christ and we have sin and salvation and the faith that God would on request spike Hitler's guns. Nowadays one hears of miracles only in institutions for the mentally sick. Before the development of the science of psychiatry many got by with what they said when they said they had seen visions. Any honest person who wishes to test the truth of these remarks can go to any mental hospital and tell the superintendent of some vision in the past and he will show you a patient who has the same vision and he will convince you he actually saw it.

How times change is illustrated by an event a few hundred years ago in the case of a cleric who was making a lot of noise—Bonaventura by name. Whether to declare him mentally unbalanced or declare him a saint was the problem. In that day in case of doubt they made him a saint as history in this case records. About the middle of the thirteenth century this same Bonaventura, a general of the Franciscan fathers, ordered Roger Bacon to go to Paris where he was imprisoned in a dark cell ten years. He was not permitted to have books or instruments or writing material. Bacon, himself a Franciscan monk, committed the heinous crime of inquiring into the truth of certain beliefs, in fact criticized a person who had written a book. It is cheering to note that when Guy de Foulques became Clement IV he freed Bacon and ordered him to write a book on science. In eighteen months Bacon wrote His Holiness three volumes which constituted a virtual encyclopedia of all science. The

cheering fact is that when an intelligent man comes onto the scene, honest inquiry is encouraged.

6) Teachers of Falsehoods. Far be it from me to discuss the group who are intelligent but who have continued in the pursuit of their childhood education. It seems that by constantly repeating things as facts they became to them fixed beliefs. It is impossible to determine the mental status of these persons. Take our Sodalist lecturer. That any sane man should say that he knows a young lady had taken no food for sixteen years seems ridiculous but how shall one take the fact that he told it to a body of nurses. The kindest diagnosis one can make is that it was a case of self hypnosis. That he did his cause only harm there can be no doubt.

X

This long preamble has a purpose. It was necessary thus to classify individuals who believe miraculous tales so that I can proceed to analyze the problem before us. A miracle, I pause to remark, is something that excites astonishment, for instance if a fisherman catches a fish. To the totally ignorant, or the credulous by nature or education anything may seem miraculous. It is not to be wondered at that in biblical times there were many miracles and the belief in them did no hurt. That the meek will inherit the earth was pleasant to those who were meek and impecunious, and was a forerunner of the PWA and the more abundant life, either or both advocates may have been honest but neither were business men.

In biblical days we doctors were wholly ignorant and we had no explanation for miracles. Anyone could put anything over on the old doctor, including Luke. All hysterical manifestations were miraculous cures when the fair lady grew tired of her tantrums. It is different now when miracles are simple knowl-

edge to every doctor. One cannot be convicted of irreverence if medical knowledge is turned on the miracles of Holy Writ. In fact if it were not the product of science we might believe that the efficacy of medical service on the battlefield is miraculous.

Unfortunately our Sodality lecturer failed to give us any details about the crucifixion stigmata of Theresa Neumann. Presumably they are on both hands since he uses the plural. I have never seen a patient in whom both hands bled. In right handed persons the left bleeds and in the left handed the right. Right there the diagnosis is made.

That the bleeding was due to some irritation, either mechanical or chemical there can be no doubt. We can be sure the irritant involved only the capillary circulation of the skin, leaving the veins intact. If a smart doctor had managed her in the beginning he would have put her in a plaster cast for a month and have sent her to visit the aunts where she would have been separated from those who made a fuss over her.

We need to precede our discussion of Theresa's hands by some general remarks on hysteria. One of the commonest symptoms of this disordered mental state has to do with the intake of nutrition. The usual story is that the patient has vomited all foods for weeks. The nature of the trouble is obvious when it is noted that there is no disturbance of nutrition, no loss of weight and they vomit only when someone is looking.

Though patients sometimes fool the doctor for a long time none in the records equalled the fast of Theresa Neumann "who has taken neither food or drink since 1926." I dare say she has lost no weight. There are two problems: a) How did she get the food? b) What inspired the belief that she got no food? If anybody did believe it. I do not believe our

Sodality lecturer did. He was extremely well nourished. He was just a supersalesman.

Even more mysterious things actuate some men. Recently a speaker addressing a lunch club of adult men stated that he prayed seven hours daily. Let us admit that by so doing he saved his soul from hell. This was of interest only to himself, a purely selfish object. Let us suppose he had hoed potatoes those seven hours each day. He would have produced three hundred bushels of the tubers of use to his fellowmen and thus have contributed to the winning of the war. What he hoped to accomplish by addressing that group of men suggests the achievements of the fakirs in India who sit on spikes to do penance for the sins they were born with. Possibly they chewed a little gum in their boyhood. Perhaps such an instance started the argument a long time ago as to how many angels can stand on the point of a needle.

Because of the lack of detail in the case of Miss Neumann we must look elsewhere for more intimate information in illustrating the genesis of these cases or better said the genesis of these tales. We may take as an illustrative case the manifestations of Bernadette of Lourdes which is presented to us as a miracle and has been the basis of a book, and even of a movie.

We will now take Miss Bernadette into our clinic and subject her to the scrutiny of modern medicine. We are told Bernadette saw a vision at a cave when she was fourteen years of age. Sure she saw a vision, as all girls of that age do. They take horseback rides with gallant knights—in the night in their dreams. It is a beautiful thing but the girls need our understanding.

I will enter here an instance where a young lady saw a vision. I was sitting on my porch one bright moonlight night when I noticed a young lady alight

from a streetcar and walk rapidly down the street. As she reached the back of a church she was compelled to pass on her way home she gave forth a series of piercing screams and ran down the street. Soon several patrol wagons surrounded several blocks. The young lady told the captain in charge that she had seen a man back of the church and she was sure he intended to attack her. I was able to tell the officer that I could see every foot of the ground in the entire block and I could assure them that the man she saw must have been a disembodied spirit. Had there not been policemen to investigate the story of a vision she might in due time have attained sainthood and the back of the church where the minister's study was located might have become a shrine!

We are told Bernadette was a simple child and remained so after entering the convent. That is true of nearly everyone who detaches himself or more usually herself from the world at a certain age. The world remains to them as it was when they were a part of it. This is true of convents, cloisters, and of scientists and special students in any line who remain children outside of their own special field. This is true of the absent-minded professors or even old doctors who work seven days a week and write books all night. This is also true of those imprisoned. Prison officials call it "stir simple." The truth is of course that they remain simple because they do not stir from their environment. It is a problem for those in the reclaiming service.

That multitudes were cured at the shrine is understandable and has been related of many shrines. We have the recent report of a well qualified doctor who investigated one of these. He was in sympathy with the church of the shrine and went with the purpose of studying how the result came about. His doctor's

instinct to see the truth was greater than his devotion to his church. He denied that there was anything mysterious about it and described the type of patient benefited. One of my doctor friends a few years ago visited a noted shrine wherein was exhibited a huge pile of crutches and canes left by those who were miraculously cured, but she noted that they were new, direct from the factory.

We are told Bernadette entered the convent at fourteen. It is the puberty age when children are most susceptible to emotional influences, including religion and hysteria. Public reproof from her teacher when she related the experience of seeing the vision was cruel and calculated to permanently impress her. What was needed was the sympathetic understanding of her teacher. Had Bernadette's teacher been intelligently sympathetic the whole picture might have been changed. She would have told her, sure some day her vision would materialize. She would have given her a trumpet and placed her in the high school band where she could wear a blue uniform with pink stripes down the pants and a jaunty beret on her head. Vision automatically postponed six years.

I have referred briefly to the question of ulcerations and bleedings as noted in the hands of our heroine. I have seen a number of such cases though they are one of the rarer manifestations of hysteria. One of the most interesting had many angles but I solved it without making a sound. It had to do with an ulceration of three months' duration situated in the right armpit of a young lady. I learned from the mother that it was certainly a dirty shame that a lovely woman should be treated so. This simple statement was enough to tell me that daughter had married some person the mother never did like and had never intended to in the first place.

Being in the right armpit I needed to know if the patient was left handed. I asked for a spoon with which to inspect her throat. She opened the cupboard with her left hand, removed the spoon with her left hand and handed it to me still in the left hand. Inspecting her throat I noted there was an absence of the gag reflexes indicating a neurotic state. Unfortunately I may say in passing the status of the pharyngeal reflexes in our heroines are not mentioned. I put the left hand of my patient into a plaster cast for a month and she was cured and remained so. The excuse for placing the hand in a cast will not be discussed because it is a professional secret. Some colleague might need to use the same tactics. I afterwards had private conversation with the mother and she admitted that the ulcer was to be shown to the judge as exhibit "A." She pretended not to know that the cause of the ulcer was artificial and of course I did not tell her. She implied that it was due to injury. I never did find out the nature of the chemical used. I have often thought of this case with satisfaction because I was then only 27 years old but I did wear whiskers, thus I am sure my appearance resembled an old prophet. At least I qualified when I assured all and sundry that she would remain well. Moreover everybody was so mystified that the judge never heard about it. That was the real triumph, but no miracle.

Of one case I write with feeling because a sweet young thing once applied lye to her thigh until it was much inflamed and swollen. She gave me the laugh after I cut into it. She just wanted someone to look at her leg. How times have changed.

The manifestations of hysteria are many and deserve a discussion because most miracles are manifestations of it. Every doctor must understand this be-

cause there are but few diseases but which can be imitated by them. One of the commonest manifestations of this disorder is paralysis. According to one of the commonest instances of miracles as related by Luke, the party was paralyzed and had to be let down through the roof because of the big crowd; after being cured he picked his bed and walked. That clearly was a miracle, then. One cannot help but wonder how he got out through the big crowd after he was cured. Perhaps he was pulled out through the roof, possibly just jumped through the hole in the roof dragging the bed after him. All miracles are painfully lacking in detail to the modern clinician.

A corollary to motor paralysis is playing dead. They may be so totally dead that even the eyes are insensitive to touch with the finger. Only a glass held before the nose is clouded showing that there is still breathing. As supporting evidence is the fact that if administered a dose of apomorphine they are very much alive in exactly six minutes. I learned from such a patient, after administering appropriate treatment, all about my parentage, past history and future destination, in a much more varied and colorful form than I had ever imagined could happen to one individual. But little of it was true. She was mad because she wanted a friend to wire her husband that she was dying. The friend sent for a doctor instead. There were no hypodermic syringes nor potent emetic in Luke's time.

One of my early cases had to do with two young ladies. These lived in a village inhabited only by young males wholly unfitted to associate with nice young ladies. I had a faradic battery which made a very loud noise. I moistened one of the electrodes in mustard solution but left the cord unattached. When the mustard began to assert itself she suddenly recovered, cured by electricity! The untreated one had

to walk rapidly after the cured one or be left behind. I can recount similar instances from memory and in most of them I know the end result. They remained well. The aggravating part of these patients is that they become paralyzed on stormy nights when the roads are bad. I record such a case in one of my previous books (*The Horse and Buggy Doctor*). The case there related was talked out of her paralysis. The vast majority are cured by mild measures. Few of these paralyzed young ladies refuse to take a walk with a young doctor in the moonlight.

Loss of voice is analogous to the paralysis of the extremities. In these cases only the muscles of speech are paralyzed. This causes only an inability to speak, and is by far more common in young ladies. In order to make a diagnosis one just looks in at the larynx to make sure that the vocal cords move. A great variety of means were employed to cure. All that is needed is the element of surprise. I had one unusual case. She was in her seventies and had both motor and speech paralysis. A relative of hers gave birth to a baby in the same hospital, not as a planned part of the treatment but the incident was seized upon as a therapeutic measure. Without warning the infant when spontaneously squalling was taken into the grandmother's room and introduced as Mary's baby. My old patient gave a squeak of delight, kicked off the covers with both feet, bounded out of bed, and grasping the infant cooed "Oo pwessus ittle baybee!" The sad part of it is that the condition of the patient was due to tragic loneliness affecting a very sensitive and intelligent woman. She taught me much in the remaining years of her life and was in a measure responsible for the writing of a previous book (*The Doctor and His Patients*). In its proper setting this might have been a miracle of the paralytic woman

cured by a newborn infant. Though not sainted officially the little lady grew to be an angel, I may add.

There was one case of aphonia (loss of voice) that is of interest at the present time. It is related that a celebrated artist of the brush, Mr. Sniffelbruder, lost the power of speech at the end of World War I. We are not told by what means his voice was restored. It was so completely restored that we must conclude it was miraculous for he promulgated the Education for Death on an intelligent nation. Miracle or not I know an old doctor who would have restored his speech in exactly six minutes flat by employing his knowledge of pharmacodynamics, that is the power of drugs, notably emetics.

To end the discussion of the emotional states here would be most unjust. Sincerity and lives devoted to noble causes abound in the literature. They all follow a similar pattern. I refuse to comment.

The most tragic life history to me is that of Saint Theresa as related by Baring-Gould in his *Lives of the Saints*. She relates that at six or seven years of age she became impressed with the lives of devout ladies. At the death of her mother she took to romance reading. She did so secretly because she knew her father would object. She said she had no bad intentions. How that child did need an understanding friend!

We are told there was a priest of good family who knew a lady but the bishop never heard of it. Theresa went to confession to this priest. To quote: "and he became extremely attached to me. The affection of this man was not bad though by being excessive it became evil. He knew well that I was determined not to do anything grievously offensive to God on any account whatever, and he assured me on his part that he had no wrong intentions, so our mutual conversation became frequent."

The point I wish to make is that this noble woman was human and she struggled through a long life because she was human, and it was to her credit. We should remember this fact when we consider the lives of women who see visions. I still hear the agonized cry of one of my patients "My empty arms cry out!" A doctor understands.

There is no more interesting study for a modern doctor than the lives of the saints. It is the same pattern as presented by those previously cited. Noble girls laboring under the stimulus of developing womanhood, easily subject to the influence of those who misguide them for the church. What that all implies I shall not mention but I know, and I know the cost to them through out their lives until death releases them. Most cruel of all, their education causes them to fear death, the only friend they are ever to know.

There is no achievement in medicine more noteworthy, I pridefully note, than that we have reached a state in which we can say there are not going to be any more saints. If we just knew as much about what causes cancer!

As a corollary one may note that emotional states can still be the basis of religion as stated by Frost. He called that sacred. To call it sacred is sacrilegious but he does show how religions may originate even in modern times. Ridiculous though his presentation is it shows that if we would study religions with open minds we would understand how many religions got their start.

XI

Earlier in this chapter I referred to the similarity of Hitler's and our system of education for death. I noted that Hitler's method was more merciful than ours. His education too began with the children.

They never heard there was any other object in life than to die for the Fatherland. On the contrary our cherubic high school boys must learn in six months or a year "to twist a bayonet into the guts of an enemy." The emotional pain for him and his family as he undergoes this process, cries throughout the land. But having learned this he is ready for this scene: "The father of one of our young men, back from the battlefield, finding that his son, like many others, would not talk, rebuked him for his silence. Replied the son, 'Just one thing I will tell you. One night I was on patrol in No Man's Land, and suddenly I came face to face with a German about my own age. It was a question of his life or mine. We fought like wild beasts. When I came back that night I was covered from head to foot with the blood and brains of that German. We had nothing personally against each other. He did not want to kill me any more than I wanted to kill him. That is war. I did my duty in it, but for God's sake do not ask me to talk about it!'" A hideous picture of war. His adversary was educated from infancy to hate. Our soldier boy killed without hate. He killed to save us poor dupes who made it necessary to do what he did out of a sense of duty. One wonders why he did not curse his parent then and there. Our boy was educated for life. He had been reeducated for death by a short course of intensive training so that he might offer his life for the cause of liberty! Liberty from what, we must ask in the anguish of our souls.

Let me repeat once more, the one educated for death from his childhood as were Hitler's pupils, the other educated in an atmosphere which taught that God is just, merciful and loving as ours were, our method was the more cruel. The soldier wants only to forget it, but that picture will be blotted out only

when his brain cells return to the dust from which they sprang. Had the German been the victor he would have pridefully pointed to the efficiency of his early education.

All parents must realize now that it is their dereliction that has brought about this need for the sudden reeducation for death when our boys were yet basking in the morning glow of the rising sun. Some did it by active participation in the teaching of the church, others by crimes of omission as we went our merry way. We were not yet morally recovered from World War I and did not see impending disaster, as did Russia, and Mitchell and Lindbergh.

I have before me data which would make it possible for me to write what is being taught our children today. It is all intended to anchor them to a semi-savage civilization. It is the same thing I was taught more than sixty years ago. Yet in the face of this teaching we have the audacity to tell them that God is just and loving. Nothing is clearer than that we have advanced far enough along the road toward civilization that we are ashamed of the jealous and cruel God of Moses. Yet we teach the children the fundamentals of what we have dragged about for more than two millenniums. Must each child struggle against this early teaching, as I have had to do, to see a light which repudiates all this early teaching?

It is hard for us to tell our boys that what we taught them as children was an education for life was not true. Circumstances have changed all that because we parents were dumb or lacked the courage to face reality. Small consolation now that our soldier boy is living evidence that a boy can be educated for life yet be ready to fight and die for what is needed to protect us fool parents who taught, or permitted to be taught, the things that brought us all to where

we are today. It was an education for hate. In spite of this these fine boys have developed something noble far above the teachings of the church. We parents should feel some pride that our boys have achieved this because we gave them a patient's love in their childhood. Else how could they be educated for death in a few months. They fight without hate; our only hope is that they may come home without hate. There is evidence that this may be true. Here is a letter a boy wrote his parents, a letter the parents received after a notice of the death of a lawyer son: "So, although you will grieve, do not, please do not, be bitter. Know that I am smiling here as I write at sea—that I am content that I am doing what I want to do and must do. Be proud that you did a good job of rearing me to do what was my chief purpose. Live out your lives to the fullest, without loneliness or pain. Wherever I am, I will be at peace, and if there is a heaven, I have a clear conscience and clean soul. And know, also that I love you above all and that to me you are the grandest, dearest people in the world." Read this again and weep!

The foregoing warrants the conclusion that the finer sentiments of mankind are the natural evolution of the human heart. It developed outside of the church, in spite of the church. Yet despite this very obvious fact the church continues to teach by hook or crook, as this chapter shows, the things that every intelligent person knows are not true. That such teachings which offend every intelligent man will work to the ultimate good of the church seems incredible. It follows as surely as day the night that those who try to dominate us by silencing individual conscience are doomed. But truth and the conscience of mankind marches on. The handwriting is on the wall,

retraced by every minister who is so far above the teaching of his church that he speaks of a just and loving God.

The letter above quoted written by a mature educated young man states "If there is a heaven I have a clear conscience." That sentence does more to convince me that there is a heaven than all the ecclesiastic perambulations about the Pentateuch that have assaulted these old ears in a lifetime. How can anyone help but cry out in his heart: *Hurry home, boys; right here is where the battle for liberty must be fought!*

CHAPTER XVII

MAN IN THE SERVICE OF MANKIND

United we could stand, divided we must fall?

In the preceding chapters I have done what I could to diagnose the condition which made the Dean melancholy, and what brought about events which caused the collapse in the Archbishop's morals and religion.

We are now confronted by a new book by Keller, one of the most widely learned of ecclesiastical writers. A few quotations must suffice: "Darkness above where human beings ask whether God is absent from this world or is seeking an alibi. . . . Darkness where it seems impossible to believe, even for Christians, in a God of love in the midst of a world of horror. . . . Today even the Christian soul has to live in uncertainty. . . . We wonder today, gazing into the subconscious depth of the soul as it is, whether it would not be truer to speak of 'the soul by its nature pagan.'"

These are sad words. One remedy he suggests: "The church must have liberty of conscience. Is Christianity possible in the present world? The church does not grant freedom to the individual conscience. It teaches obedience." Conscience is individual as I have tried to show. Christianity is not possible in the present world. Our present muddle is due to the attempt to force it onto a world which faces the call of conscience. He calls for a rebirth of Christ. The same remedy which failed will not heal on further trial. His God is in darkness because he never came into the light. To make him a God of love is out of the question. To cry out for a God of love only indicates that we have advanced as individuals beyond a jealous and cruel God.

In the Dean's case it was wholly a question of diet. The people got tired of the ecclesiastic pabulum of-

ferred them throughout the centuries. He notes that a divided church cannot perform its functions. Certainly not; division caused its failure but hate will prevent a reunion. It seems therefore we must seek to build on a new basis. This chapter seeks such a plan. In the case of the Archbishop the matter is different. He rejects vehemently the idea of any change in diet; eat more of the same, even though according to his own admission it lacks sustaining vitamins. And now comes Keller suffering more than the Dean and the Archbishop.

The history of the church as I have traced it, has failed to reveal any particular concern about either morals or religion. Such mistakes are bound to happen if one confuses the church with religion. Certainly there has been no lessening of morals as presented to us in the Old Testament: naught from naught equals naught; out of nothing nothing comes.

The difficulty is fundamental. Children have been educated for the church but the education has been stopped after they learned all they need to know to serve the church. This has proved disappointing even to the ecclesiastical dignitaries. Careful following of the church has not kept us out of but has allowed us to drift into global war. Children cannot fight wars nor keep us out of them. This requires grownups, adults with ears attuned to the call of conscience. The architecture of the building the church has erected was and is a marvel of human ingenuity and organization, as far as acoustics is concerned, but grownup children looking out of the windows at the world of reality about them have found the atmosphere oppressive and just pushed a window out, thus admitting fresh air. Churchmen instead of lamenting should have been glad. The church should have recognized the fact that the noblest of the race want a good

God and if the clergy cannot provide one they will make one of their own.

I believe a careful study will convince churchmen, as it has me, that a change in fundamental viewpoint is needed. Keller suggests that maybe the soul is pagan. It is not the soul but the church that is under trial. A more careful study of the meaning of the cross and the Christ of Paul is needed as I have indicated. He sounds a word of warning. He quotes Vinet, that the trouble in searching for the truth is that we may find it. This clergyman despite his great learning does not mention Jesus or the Jesus concept, the mother and the babe, the home and the father *conscientiously* laboring for their betterment.

The situation is hopeless. I have suggested that if we could just have buildings where we could have music, little talks of how to avoid hell between birth and death, a nice place for Mama, Papa and the Kids, we would be able to create a new civilization of love and work. Having ignored this obvious lead we have chaos, both for those who led and those who followed.

I

We cannot turn back the hands of time. The drift in civilization has been definitely away from mythology in the twentieth century toward a state of the brotherhood of man. To have a brotherhood of mankind we must educate our children to be men and women just as we are, only better. The drift toward such a state is now more rapid than in any period of history because the present catastrophe emphasizes more definitely the futility of the continuation of dependence on revelation with its lust, its hate and its blood. It is obvious that an entirely new point of view is necessary. Those who refuse to see the light will just have to wander about in darkness, and howl.

We doctors sympathize with the clergy because we once wandered in the darkness of ignorance. We hunted for truth, hoping we would find it, and we did. The science of medicine, as indicated in the previous chapters, has developed along different lines; like the dog's hair in the springtime the shedding process of ignorance has been a gradual one. The dog does not notice much change from day to day but in a month he is ready for the summertime. If a bit of belief is no longer serviceable it is shed gently without pain. We doctors have proved that.

II

We have seen that in the beginning the clergy and the doctors were alike. This screed is being written to show that gradual accretion by effort of men throughout history has been of greater use to mankind than the mythologic concept of a by-gone age. There is no gain in referring to that again. The problem now is to turn over the painful pages of history and start our records on a new sheet. The present situation not only invites but demands the best efforts of all altruistic-minded people. The problem is to avoid the mistakes of the past.

We should find a term to designate the new association of the clergy and the doctor. We jointly must become physicians for whatever it is that ails the world. I lack a word; having none I suggest the term *Humanist*. I suggest a new term so that we will not be confused with those parties who educate for ignorance. Humanists therefore are what we are and the definition will be written by our acts from now on. Lexicographers will just have to wait until we have found out just what we can make of ourselves, then they will have a definition for the word.

The new field is "religion in illness and health" which implies that we are going to build a new re-

ligion—a religion of service. We are to find out the facts relating to causes of suffering not due to organic disease as well as ill health due to organic changes. It is the search for truths that must form the basis of all our efforts. Therefore it is the science of human understanding in the relation of illness and health. From now on we are both scientists, worshipping at the shrine of the God of science viewed in the broadest way. We must search for the truth. Truth we must understand makes one feel that he is on the way of accomplishing something immortal. Now both professions working in harmony with that end in view can and must make of our work a new common religion, a striving to do nobler things than have yet been achieved. Definitely it must be *us* in the service of mankind. Working with the faith that our best efforts cannot die is my definition of religion. Now we can understand the dictionary's definition of religion. "Recognition on the part of man of a controlling superhuman power." The idea of the God of science is frightening at first. Even though you can't talk Him into granting special favors like straightening out people we do not like, He will not smite us for anything but loafing.

In harmony with this our religion is not something one just swallows in the hope that it contains vitamins. We must prove that it contains substances that are life-sustaining before offering it to those who trust us.

Approaching our problems in this spirit our professions are no longer opposed to each other. To call us ministers and physicians does not suit us doctors because we are ministers too. If you can make a hurt stop you are doctors also. It implies that by joint effort we can rub a common ointment on what is wrong, extending all the way from parents of "Johnnie reported missing," to the autopsy of a diffuse cancer.

We are two legs supporting the same backbone, one end of which is to sit on, the other to hold our heads up, which means it must have some stiffness otherwise it could not hold our two ends apart. There must be a division of labor; we can make this clear by granting different degrees. One of us are F.D.'s, functional doctors, treating diseases we cannot see, and the other O.D.'s, organic doctors, treating people having disease we can see under the microscope. Won't it be something when we can greet each other with "Say, Doc." We are specialists in the treatment of the sick.

III

In order to allay any scare at the innovation I must digress for the moment to answer a question. I am asked "What would the world be without churches?" We do not need to try to imagine a world without churches. First of all I would change the name to *religious edifice*. The hybrid term "*Christian religion*" has no place in the new concept of a life in human service. These religious edifices are the offices of the F.D.'s as the hospitals are to the O.D.'s. We could use different parts of the same building. Music would be fine for all our patients. Loud talk of course of things that never happened will be barred. The advantage would be that some of our patients who need to consult each of us at the same visit could do so by just stepping over across the hall.

We need to keep the religious edifices because equipped with modern machinery as they are they can keep up with the procession of human progress. Their chief function will be to take care of those who have nothing organically wrong with them. Look at us. We have our magnificent Public Health organization, the chief function of which is to keep people from

doing fool things which will not only hurt themselves but the whole community, like smallpox.

The biggest job of all is to keep folks from getting sick. You will need to organize a department of public health of your own. Eternal vigilance is the motto of our Public Health service. You will have the chance for mingling with young people and the young people to mix with each other. A religious edifice is no place for persons who do not like to see kittens play so you will need to recruit your staff from those who like children because to study the tide of adolescence is the important thing, not to stem it. The thing is to teach them that they are young animals; which isn't any sin.

I suggested a new name for us because the word *church* connotes ecclesiastical things which are apt to frighten the children away. Not long ago a boy aged ten exclaimed to a companion "Oh goodie, this is Saturday, we don't have to go to Bible school." One of the finest of my ministerial friends is much loved by the young folks and his chief interest lies in this field. Yet he feels that it is necessary to inject some religious ceremony into meetings. Children are not interested in leading in prayer. One little lady commented to me that it was silly and that she wasn't going back again because she had been asked to lead in prayer. Some time ago I was asked to talk to a group of boys about rifle shooting. The rules of the institution required that the meeting be opened with a quasi-religious service. I felt sorry for the boy who mumbled with embarrassed expression the required lip service. Those boys came there to learn how to sight in a rifle. This required lip service did them a hurt. In a word we should help young folks learn the things which are useful to them, and not make them new editions of ourselves. If they can't do better than we have done they are wasting their time in

being born at all. I know of what I write. I have taught medical students for more than forty years and many of them have gone so far that I do not understand their language. The fun to me is the consciousness that I have not tried in vain; they know more than their teacher. In this sense each of us makes his own world.

If we will do the best to teach them all we know it will spontaneously eliminate the worry about what comes next. The big opportunity is that there are always children asking for companionship of their elders. The numerous kid organizations, scout trips and all that, needing leaders. That is our greatest field. No one is really educated until their children have given them a postgraduate course, and they even see things in Grandpa that need readjusting. The benefit of the contact is mutual. Get out with them and entertain your share of chiggers. Any small boy would get a laugh out of seeing the Reverend Mr. F.D. searching for chiggers. He can show a nobler spirit by the way he scratches where it itches, than by talking Old Testament mythology. In a word human understanding is the link the F.D.'s can supply which will unite the children to them and together they can study the flowers and the stars. They haven't learned to sin yet and to take them in charge is the greatest prophylactic measure against things which would otherwise require remedying later on. Keep them away from the Old Testament and they may never learn to sin, at least in a big way.

The foregoing makes it evident that there will be need for specialization among the F.D.'s. Perhaps the most promising field for intelligent prophylactic management is the mating field. All will be making investigations of their own sooner or later.

IV

If we could only forget everything but the mother and her babe we could start out without handicaps. No doubt the great crying need today is for better parents. But it is wrong to approach the problem in an accusing manner. Events have developed so rapidly we parents just have not had time to adjust ourselves to the new order. Sure we need better parents, just as we need better doctors, both kinds of us. In both groups we have the best that has developed to date. It may be safely said for both of us: we can advance by recognizing the new requirements of our unfolding world by trying to make the present fit the past. But we must realize that we all are far short of utilizing our possibilities and our opportunities.

Rotten as the present situation is I believe it is better for the child to sit on the doorstep and wait for its parents to return from the bridge party to unlock the door than to be reminded every few minutes that papa will give it a licking when he gets home because it sassed the preacher when he told him he was born in sin and would need to be born again, or go to hell. Home?—nay, a breeding pen. Fear and love are mutually exclusive.

Just now parents are placed under a terrible handicap because of war, always a stimulus of hate and sex. Nobody has any time to understand the needs of young folks. This is obvious because the current parental indifference is of deep concern to peace officers. A nearby chief of police called a meeting of representative parents and presented the difficulty his officer had with 'teen age girls. He told them what it means when a girl whispers to a boy in uniform "I have a key." After he had presented his case his audience languidly arose and asked "Is it really as bad

as that?" My officer friend felt that was an expression of appalling indifference.

But at the time of that meeting he had seen nothing yet. A few months later in a neighboring town at three-thirty A.M. police found girls aged 12 and 13. The girl of 13 was from my friend's town. One of his officers was called up at that early hour and informed of his charge. This officer called the parents of this girl and told them where their girl was to be found. "Oh, is that so; we thought she was in bed." My friend said never in his life did he have such an urge to arrest anyone as he did to bring those parents to the lockup.

The preceding paragraph might indicate parental indifference but it is far from that. The large word *obfuscation* was coined to describe just this situation. They are deeply concerned but the whole thing seems so involved that no set of parents can figure out just what can be done about it. It is out of their hands and has become a community problem. It is all but impossible to separate one's own children from the common herd. "All the rest of the girls and boys are doing it; why can't we?" is a most difficult question to answer. Usually it is not a question but an expression of defiance; they are telling the parents what they intend to do.

Parents feel uncertain because parent-child relations in the generations just passing has been so. We remember as 'teen age children when we thought we knew more than our parents. We were right, we were viewing a new age foreign to them. When I was a lad, for instance, I had visions of an education. The neighborhood had a fit, rushed to my parents with the alarming opinion that education led direct to hell. Some of these people believed as they saw the unfolding, that their prognostications proved correct.

Parental problems of today which so deeply concern the police officers are the products of the times. The parents mentioned in the preceding paragraphs were employed in essential war industry and were sleepy. War, hate and sex belong together and we are reaping the harvest of the sadistic teaching of the millenniums. An efficient remedy must be based on a correct diagnosis.

The sum total of the morals of a community is greater than the parents of that community. We need to study the influences which reduce the average of community morality. Influences which we do not approve but which are legal. The chief of these is the literature children are subjected to and the other is the character of the movies. It is amazing how quickly very young children catch the suggested immorality. One evening I accompanied a portion of my children to a show in one of our principal "palaces of art." The scene showed a lady in a lacy bed. A male dressed in a dressing gown appeared in a doorway. Like a flash a nine-year old girl sitting in front of us exclaimed "Lookie, he is going to get in bed with her." My own little girl beside me was shocked. The same influence exists today. Young ladies with a bushel of hair pose on the seat of a tractor, supposedly helping the war, dressed in nothing but a breechcloth. This is an insult to the many fine young farm women who are doing excellent farm work. Suppose the scene showed a farm woman dressed as farm women really dress, then one could grasp the idea that they were concerned in the primary object of getting the wheat harvested.

So it goes, the sadistic heritage of the past is enlisted for purely business purposes, business has no morals. Where is the borderline between what is legal and what is not? That is the only question. It

is parents who make the laws or permit them to be made. We know that nine-tenths of the reading material on the news stands tends to stimulate not love but lust. Sometimes it is just a matter of zoning the city. I do not know of a single police chief but whose morals are better than those of his people. They would clean up, but it would keep people from coming to the town, they are told. So long as one can read Exodus vii in our inspired Book, so long as it is admitted to the U.S. mails, there is little hope of getting at the root of the trouble. It is only by casting off all memory of early teaching and looking at facts as they are today that we can hope for elimination of those things that draw the children away "because the rest of them are doing it."

Of course apparent parental indifference is due to the dizzy advance of our times. Even before the dislocation of war, papa earned too much money, kept mama too busy spending it. There was too much gas to be burned in the auto, too much vocal gas that must be equally distributed throughout the neighborhood. Papa could afford a hired girl and mama, delighted with her new freedom, had a sensation which she did not recognize but knew was not due to lice so she thought it was an urge for the study of the philosophy of the "heathen Chinees," perhaps. Parents must learn to make the home more interesting than any other place and unconsciously cause the children to feel the same way.

Many women conduct home courses in dietetics, the pupils their daughters. This course will be of the greatest prophylactic value later on. This evening I saw a young male aged eight industriously polishing a dish for his sister. Love for sister and brother. That is where the morals problem must be solved. Children must be educated for love instead of for the church.

If we could only eliminate all the teachings through the Dark Ages clear back to three thousand years B.C.! We must go back to the Egyptian mother to find the counterpart of our modern homes. In that delicate love, just a tinge of sex, is written the first sentence of the marriage contract. The child in the home, parents, brother and sister. That is the foundation of the next family. The child is the problem of each man and wife. I see so many fine parents that I have no doubt we are headed for a brighter day. Give mother a chance! It is thrilling to imagine what she will be able to do in 2000 years, after she learns what to do with papa's money, and her spare time.

The marvel to me is the change in the lot of the child in the last 50 years. We never see a frightened or neglected child in the lobby of the Clinic any more. This means there is no lack of parental affection. There never was a time when so much thought and care was given to children as is the case today. Whether the devotion is always wise is a much more complex problem. A president of a large university once remarked that it was no wonder that his institution was the repository of so much knowledge: "The freshmen bring in so much and the seniors take away so little." Yet if a student can learn in a mere four years how little he knows he has learned more than most people learn in a lifetime. The point is that with all our vast education, under stress things fall down.

V

In the preceding paragraphs I have discussed the sanitary specialties of the F.D.'s. It is a more pleasant, at least the less unpleasant task of discussing our joint professional labors.

The F.D.'s can go where the O.D.'s cannot. Very properly our professional ethics do not permit us to

go on the hunt for sick persons, because they might be patients of some colleague. We call that professional ethics. It may sound silly to outsiders but that is the mark which separates us from the quacks, the money-changers who wax fat in the shadow of professional achievement. But the F.D.'s are free to hunt for something to do. Is somebody needy—see what it is about. If a destitute child has rickets he needs a doctor, bring him to us and we will fix him up, but your labor is not done yet. You must follow him up and find out why the child was destitute in the first place. Most likely it will be discovered that there were just too many of them, one pushed away from the mother's breast to make way for the next one. This most likely is associated with low family income which spells less nutrition to the infant, low intelligence in using unprofitably even what little income there is. These people are noble in their feeble way, some reproduce because it is a duty, so they have been told. Why reproduction to its ultimate limit is encouraged is based on the need for producing soldiers and for more souls to dance about the throne, and to do a little miscellaneous dancing before they are ready for the celestial sphere. The result in many such families is that very commonly some member is defective physically and mentally requiring care in an institution for the mentally feeble or require care for some physical defect, or is a candidate for the more abundant life.

How such things work an instance will be shown. I learned from neighbors of a child of an ignorant, therefore a needy mother; I asked the clergyman of the community if he knew anything about it. "Don't know," was his indifferent reply; "they don't belong to my congregation." I went to see about it. The last child in a series, son of a father in the last stages of

tuberculosis, the infant illy nourished to an extreme degree, sick with spinal tuberculosis. The treatment of this child should have begun several generations before it was born. I will not mention the hereditary and acquired diseases. Of course nowadays we have visiting nurses who ferret out the needy, but these "angels in white" cannot reach the children before they are born. Before they are born the parents have the sacred right to do as they wish, just as regular tomcats have. That it is only the affair of the parents is not true, it is an affair of the community because it concerns the welfare of all children. I mention this to show the wide range the problem of better parents reaches. It is the problem which concerns all parents.

VI

Considered more directly as the field of us two kinds of doctors our tasks are automatically divided into two great groups. Some people are sick of body, some are sick at heart. By sick of body I mean everything that causes suffering due to anatomic change which we can see with the microscope, or to disturbances of physiologic function, belong to doctors in the old sense. On the other hand the nonorganic, or as we say, the functional, belong to you new class of doctors.

The ever expanding knowledge of the physiological chemist makes the borderline uncertain. Much of plain grief we find is due to endocrine disturbances, formerly classed as mental aberration or moral cussedness; we now find organic extracts which control them. Therefore when we doctors find something we can cure by our little pills it definitely was due to disturbance of physiological function and was not due to meanness. By the same reasoning if in the inorganic group by proper management of your thera-

peutic measures you relieve the patient of his trouble, it was due to heredity or environment.

In the abstract this forms a basis of our division of labor but in the individual case it is much more complicated. Disturbances of conduct may lead to organic disease or organic disease appears first disguised as problems of conduct. I mention this here to show how intimately our fields are related. The kinds of cussedness which cannot be cured will need to be remedied by preventive measures. For instance in an Eastern state some folks got the idea that there were too many moron criminals. It became a problem of the Supreme Court. All the judges agreed with the people of that state except "Justice Reynolds dissenting," which might mean that the Jurist believed the more the better, irrespective of the quality, as noted in a previous paragraph. More likely, let us hope, it was only loyalty to his church which actuated his decision. This means that the sledding is not going to be smooth. It means there is going to be obstructions in the work of the functional doctors just as we organic doctors have found it. That is we must oppose those agencies who oppose what is best for the race as a whole.

VII

Just what sort of education will be best for you F.D.'s will depend on you, varying from time to time as experience will dictate. Only two things are clear. You must want to help those you serve, must be able to just forget everything else in that service. It will be far better to be wholly ignorant than to be miseducated, filled up with revelation.

Fosdick is a funny preacher. We must elect him dean of the school where you O.D.'s are to get your education. As noted before, his election is warranted by the fact that people buy his books. I have read

half a dozen of his books and even his own education has required some years, so don't become discouraged.

We O.D.'s have a definite course requiring a minimum of eight years after high school before we are even ready to begin. Of course our boys must learn a lot of useless things. The pre-medical course is supposed to develop the mind so they will be like their professors. No great hurt because all they remember is the Frats and the dances.

Just what the education of you F.D.'s should be must be determined by experience. You must make your own curriculum. With you it will be as with us, your education will never end. That this new group is well along the way of determining what this new education is to be is already indicated.

Recently a number of books have appeared which seem full of ideas for the education of the F.D.'s. The book "On Being a Real Person" (Fosdick) sounds a new note. It is significant that such a book should be written but even more so that it should have a notable sale. It indicates that people want to know about things. Faith in their own ability to do a little fact hunting on their own account. There have been a number of enlightening books published in recent years, notably by Wise and by Ray. These efforts will ultimately develop into a definite course for you F.D.'s as we O.D.'s have it today. In general it may be all right to study the social sciences, but like an O.D. he should have a very broad education so that he can contact all kinds of people on a level they may understand, whether it be Poland China pigs, Holstein cows, Shakespeare or Ibsen. Of course it can be overdone. If one of us mentioned Kant or Browning we would be tabbed as having lived a misspent life and patients would avoid us. The point is of course if you can talk right down their alley they

know instinctively you are all right. Of course one must use tact. Tact at all times is a fundamental requirement. This means that we must know all about our patient for years back. To ask a lady how her husband is and to be told that he died four years ago puts us in an embarrassing situation. Or to ask a lady how her son John is getting along when you should have remembered that he is in prison—the answer is self-evident, he isn't getting along at all—referring now of course to John.

VIII

Let us see how our joint services will work out in practice. A patient comes into our clinic. Someone gets a preliminary history in order to determine if he belongs to the F.D.'s or the O.D.'s. The assignment is provisional, the final disposition to be determined after detailed study. What for instance at first seems to belong to one domain becomes after further study the task of another. For example a child is unruly and seems to be a moral problem. The first thing to do is to diagnose the parents. The child may be only exhausted trying to keep track of his parents. We find that the trouble is due to a refractive error and glasses relieve the trouble. That is to say the adjustment of glasses may at once solve the problem, of a problem child. Or perhaps what seems at first to require glasses, when the eye man looks into the eye, he sees dilated vessels suggesting something else, for instance, hereditary disease or a brain tumor.

The reverse may be the case. Perhaps the first note on the clinical record may be suspected brain tumor. Examination of the eyes may show some defect relieved by glasses. The trouble may in the end prove to be one of the vast group of disassociated personality requiring the prolonged attention of the most skillful F.D. That state may be aggravated by some en-

doctrine disturbance requiring medication and the O.D. gets in on the case, both working conjointly.

It will be necessary of course in some cases, when we both fail, to have a pathologist to do the autopsy to see which of us was right, if either. I know a number of instances which seemed to be clear cases of moral disturbances, or hysteria, in which the autopsy showed a brain tumor. Therefore both of us must in some cases await the autopsy for the final decision. This means that we must pursue our labors with open mind ready to see the truth as it develops. It takes a real mind to say "I do not know, yet," and "I was mistaken, the facts were there but I did not think right."

One thing is sure, it will be an all day job for all of us. Office hours from 8 to 5 and by appointment. Consultations must be available at all times. Just now I have at my elbow specialists in all branches. I say "George, see if this guy has stomach ulcers or pylorospasm," closely associated lesions. An operation may be needed, perhaps worry over business, or an unruly concubine, causes the spasm. We must find out. You can't cure income tax or a peeved wife by a stomach resection.

We must call our new colleagues neurologist-psychiatrists. If we told our patient we want a Reverend to see him the patient would have a fit. These people definitely do not want to be prayed to or at.

Inasmuch as the study of facts is science so we are all scientists and by devoting all we can to the service of mankind we each of us make of it our religion. This religion being a common creation there cannot be a quarrel. When that day arrives, "Say, Doc" won't that be a glorious feeling? The best part of it is we can start doing it right away, by writing on the new page we have turned, as noted above.

IX

The old doctor in years past tried to prescribe for both kinds of ailments. I belong to this group and I reluctantly relinquish this phase of the management of the patient. But I have learned how a tactful word can remedy a whole world for the patient. But it must be intelligent and tactful. No one more than I sees the need for someone now to take over the non-organic ailments of our suffering fellows. The advancement along all lines has been so vast that it takes a lot of us to assemble all the knowledge available to the patient, that is if it can be made available to them. In a previous book (*The Doctor and His Patients*) I presented a diagnosis of the problem of the home. It was an anguished cry for help. It was an appeal to the ministers. Many condemned it because I ventured the opinion that it all depended on what two people did about it after the ceremony. It was an affront to the clergy because when they said it was holy, because they made it so, it stayed holy, so there now.

It was an honest attempt to present the truth; it is the truth. As in all things that cause suffering the first thing to do is to make a diagnosis. The doctor's life is made up of attempts to find the truth. It becomes a habit, one reaches a mental state where one does it no matter what the condition may be. All written, these I had seen, even worse things than recorded. To record the facts in my casebook where only my own eyes could see but to write it down so others could see it I found to be a vastly more painful procedure. It excited a peculiar emotion. I knew it would shock those who did not know the facts. But it was something more. Collected together it painted a picture of human cussedness that made one ashamed of his civilization, and also proud of it.

X

The only escape from the depression, as we view people at their worst, is to remember that on the average it is after all a fine picture, the noblest in human experience. We doctors get a look into homes and learn that on the whole the world improves. To suppress the sordid and glorify the beautiful is within the power of society to achieve. To do so requires the recognition of the truth. Only by so doing can one institute prophylactic measures. To recognize the truth and get the truth to where it will do the most good is the problem.

Some ecclesiastics recently discovered that there is no such thing as a Holy Ghost, a part of the triad we learned of as children. The word means spirit, so they say. There is some sense to that. That is the greatest contribution made by higher critics since the days of the Pentateuch. The child is created in the spirit, in the spirit of love. That leads us back to the mother and babe in Egypt. The mother figured out that the babe was quite a feller, not something started by an anthropomorphic jealous God. Spirit is something you don't know about, you just feel, or you do not. This just adds up to the fact that the beginning of love is what we make of it. What man has achieved is capable of improvement by man. Those who have not had babies of their own, by election or misfortune, just please stay out of this discussion. They know nothing about it.

Considered in this sense the babe just hands you the beginning of the line called spirit, it begins with the babe and ends in infinity, a line on which you hang your achievement, as wash on the line, as you live your life, the sum total of which is your religion. There is the setup, love and religion at their best.

XI

Fosdick has the courage to see that sometimes God is no match for the rampant endocrine glands and needs help. Moral suasion breaks down just in the degree that there are no inherent morals to break down. In some cases even a sedative may be indicated.

They arrive at the age of puberty and fate tells them it must have more children. The boy discovers that the girls have a shape, some different than others. What the girl discovers in the boy is beyond me. The fact is of course that the endocrines hear the voice of nature. The wise parent will already have acquainted them with pollination of plants, as they "walked the daisied fields together." Now even at an early age is the time to have them read Fosdick's incomparable Chapter vii. The urge needs our attention. If we gained their confidence in the study of pollination they might come to us with their early troubles. We must never allow it to get out of mind that the ideal is not to solve the divorce problem but to prevent it. Now at this age is our opportunity. Like sin they must understand the early urges, that they can be controlled. Always the picture, the mother and the babe, and that the intervening period must be conducted to that end.

By the urge of our conscience we attained a high degree of moral resistance. In advancing we made ourselves complications. The automobile has much complicated our problem. Neck they will, shall we tell them the problems? Some cases certainly. Will it do any good?—some cases certainly not. There are some cases a small operation will help. On the whole we O.D.'s are not of much use to the young folks at this stage but we may be of great service. When in doubt tell us your problems that the young folks bring to you.

In times past the problem was simpler. The parents

selected the young people to be mated; do it before they find out what is eating on them, is the idea. That had the advantage of bringing like natures together. But it is too much like studying the pedigrees of cattle. The result is calves. What we want is little angels and these must be preceded by what the girls think is romance. It is really the play in which the boy thinks he is winning the girl. Happy is he who never wakes up, and this is not written in a spirit of derision. It is the foundation of a happy home. Nowadays it is done more delicately. When Mama invites Boy Friend to Sunday dinner or if Sonny bring Girl Friend home to meet Mama, he might as well curl up and play dead. Henceforth all he has to do is to listen so that he does not miss the date.

Date arrived, what are they going to do about it. It is to be a pledge of all that is best in the young folks. One can buy a staple article for any price from two dollars up. Just what it is the society editor writes up is a problem. It is the boast of the fisherman as he exhibits his catch but in addition all sorts of contraptions are discussed so that an old doctor is led to believe there are at least six layers, like petticoats of the old ladies.

It seems to me that the Quakers have the idea. No four flushing, no parade, every evidence of sincerity. A patient told me how it was done in her case. Parents, brothers and sisters and a few friends were seated about the room when she and John came in and announced that they had decided to be true to each other. They did not kiss, they did that before they came in. Can anyone imagine anything more beautiful? "Who got the fee?" I asked. "Fee?" she asked—"never thought about that. I reckon we ate it up." And added "Twenty-five happy years;"

the four children ranging from 24 to 15 years beamed in assent.

Now I get into deep water. I told a clerical friend about the Quaker wedding. He remarked testily that they were not married at all, that they were only common law man and wife, it was no marriage without the blessing of God. God of Moses or God of love, I asked and he got madder.

Just what does my ministerial friend have in mind when he says a marriage to be such must have the blessing of God? Perhaps the ideal is the church wedding with all the trappings. It is the concourse of the curious, like a prize fight or a hanging. The question is, what is the audience thinking about? The girl friend plays something or other on the organ but most of the rubbernecks are humming the old tune "Oh, what Will the Harvest Be?" I hope I need not be any plainer. My grandfather's marriage ceremonies were positively vulgar, required two or three hours. More soldiers, more souls to dance about the throne. That was their job.

XII

Now when we get to working together it will be interesting to subject the whole procedure to scientific investigation. Take a hundred marriages made holy by ministerial friends, a like number by the judge, and a hundred Quakers. Follow these for fifty years and add up the results. I venture to say it would be found that the results could have been predicted by analyzing the life histories of the contracting parties previous to the nuptials. The point I wish to make is that it is a matter of prophylaxis against the things that ultimately bring disharmony.

I mention the above instance because it was not complicated by other factors. When we doctors give a number of drugs and a favorable result ensues we

do not know which drug was the main factor. If we only give one we know just exactly which one is to have the credit.

So much of our joint effort will be required to solve problems of family relations that it requires further consideration. Keep the kids busy. Keep the young minds off the idea that the main things in life are to be found in the age of reproduction. I would teach them the facts of life. It is countered that a small boy seeing the groom kiss the bride excitedly exclaimed "Mama, are they pollinating?" Much suffering is caused by misinterpretation of the nature of the marriage contract or ceremony. Tell them the marriage state is a terribly responsible contract, that if they want to do the right thing by their children they must dwell together in love and respect. Tell them that your part is small indeed, that you will be interested in their welfare; if at any time things do not go as you predicted, to come to you and you will try to see what was wrong or you will go with them to see an O.D. You are responsible to and for them as long as they live. Tell them that the orange blossoms do not represent security from error and are only emblematic of vitamin C which is a remedy against scurvy, and some of it must be consumed every day.

Love is not sin; it is fun. One can't tell them anything. One must prepare the environment before they arrive. They will not listen because they have more pressing business in mind and the heaven they vision is populated by only one angel. Sure she is an angel but it will be quite a contest to escape disillusionment. The angel must exchange her wings now and then for a mop. In this de-hell-inized world they are not going to be much interested in prognostications as to heaven, they have discovered it, at least for the time

being. A tactfully presented road map with detours plainly marked may save both gas and rubber.

Then don't think you are the only cheese in the pantry. If there is something you do not understand bring them to us O.D.'s in the other end of the building. Maybe they need bromides or maybe an operation. The idea is that we must do all we can to keep them from the attorney for the plaintiff. If they get so far they might as well have stayed with those organizations which specialize in hate.

Speaking of detours I now face a detour which I would like to detour from. Weatherhead, et al., have written a book in which religion is proposed as a measure for the mastery of sex. There is no use to talk to those who do not or will not understand. But religion in its usual sense is a manifestation of sex. Don't blame me, I did not create either. In the chapter on the history of the church I hinted at this relationship. The hysteria of revivals which used to gladden the hearts of evangelists was awful. Religion, so-called, sex—and war. Just take a look!

Certainly one will never learn there is such a thing as virtue by study of the Bible. A fine mother and a sister are the guides to which a boy must look.

XIII

Until we have several generations of young people on whom we have exercised prophylactic measures as above indicated, we must start with the postnuptial period as we find them. I have already discussed it from a doctor's point of view in my previous book. The great need is to guide the couple during the period of readjustment. Neither clergy nor justice now are interested. They have collected their money and have gone home, or the newly wedded have. The one is complacent in the belief that he did a perfect job and it will stay put. The other has the satisfac-

tion of knowing that if the eggs become scrambled he can unscramble them, no matter how rotten they have become in the interval. Many come to us doctors in the period between the clergyman and Act II of the judge. More care is needed during the period when it is nobody's business.

Of course there are courts of domestic relations which are supposed to bridge the interval. Fine as they are, when they are reached the patients are already quite sick and they don't know it. The time to remedy is before they know they are sick. The chief activity of a public relations court seems to be to investigate the situation in impending divorce trials. One cannot resurrect a love, no more than one can resurrect a body. The person who knew them in the ice cream-lollypop stage will be received more kindly in the early stages of the disturbances.

I know what I am talking about. A common visitor in our clinic is the patient who comes just to be checked over to see if there is anything wrong. The point is many of these suspect there is something wrong but they are not going to tell the doctor what they have in mind. They don't fool us. Before we get through with them we know all about what they have in mind but they do not know we do. I have saved many homes by skillful lying. Unfortunately the prognosis is nearly always bad. Really they only stop at the clinic to see if they can gather evidence of use to the attorney for the plaintiff. It is no use to try to tell a mad woman anything, truth or lies.

Most of these women are old patients and I know friend husband. I relate how John and I once had a nice visit, real or imaginary, at a convention or somewhere or other. How John complained that the water tasted of coffee and how he skinned his shins climbing a telegraph pole at the sight of a blonde two

blocks away. In rare cases this plan has turned the trick but only in cases where it is a sudden burst of anger. If the difficulty is a gradual growth of jealousy the disease is incurable. Even in the absence of any knowledge one can laud the high character of the husband. They are the kind of men who draw jealous wives. Funny, rounders are defended by their wives.

I have discussed thus at length the family relations because the wreck of the family is not only a family but a national tragedy. Our difficulty is greater than in most nations because of our polyglot population, and the free unhindered association of young people. Young love's sweet dream is fine but when a spend-thrift unites with a frugal party it is destined to be but a dream unless the craft is carefully guided. Fortunately our population is becoming so thoroughly mixed that representatives of pure nationalities are rare. The only really disgraceful thing we face is the indifference of the courts. It is the easy resort of the fool and the adventurer.

I have placed so much emphasis on the divorce problem because it has to do with the family relation. The relation of parents and baby is the only phase in human conduct wherein we are above the lower animals. The indifference to the marriage relationship strikes at the very foundation of human advancement. The indifference with which the ceremony is performed, indifference of ministers and judges alike, is the major disgrace we have to face. I have seen so much that is fine in the family relationship that I know what the finer side of love and parental affection can be. Church and politics show shocking indifference. We must build aside from both of them.

XIV

Away back in the traditions of mythology the Buddhists had a god of little children, Jizo by name, a God who made calm the troubled seas, a divine protector and playmate of little children. He was a god essentially of the feminine heart, revealing her capacity for love, her sense of the beautiful. Only on love can we build a civilization, love which controls sex. Only when sex is made subservient to love will lust be eliminated and with it hate, bloodshed and war.

I believe that a fair summary of this screed is the simple statement that the savior of mankind is man. The noblest deeds have been the work of individuals working within a conscience guiding to the best efforts. We doctors of medicine have shown what can be achieved by honest effort, useful to all mankind in this hour of need, let me repeat.

Individuals, or associations of individuals demanding obedience of conscience, sometimes dislocate immeasurably the course of human events. Suppose the convention of 381 had never been held, that the simple story of the mother and babe had been allowed to stand as it came down through the human race through the ages. It is too late now. The disciples of Moses have brought us to where we are. Still the repository of hate, educating for mediocracy, demanding obedience to authority, designed to perpetuate power of those who dominate. What would be the best for the individual, and for the nation has been ignored. Bawling one's eyes out praying to a God who is cruel and jealous can give back only cruelty and jealousy. Trying to make of this God one of love and beauty, as civilization now demands has proved pitifully futile. A good and loving God can only be created in those whose hearts are noble and unselfish. This can be achieved only by other hands

than bigots, by those who will search for the truth with the *hope* of finding it, and then have the courage to follow where it leads.

XV

Up to this point I have written with a certain degree of confidence because it has fallen within the range of my clinical experience. There are things to be solved which lie outside of my ken, at least are beyond my words to express. I am told there are many persons who must be allowed their simple worship in their old age. That is true of the simple minded who have been trained to this need in their childhood but these fine old ladies have constructed for themselves a good and loving God and they await the release from life nobly and in faith. Somehow they have reached the same feeling that scientists come to know as they view the River Styx. When I meet these old ladies I feel like saying "Move over, Grandma, and make room for a kindred spirit!" We both have a funny feeling inside which we had when we looked at our sleeping babe many dark ages ago. It isn't asthma or hay fever. Perhaps we envisage a little mitten, a shoe which we have tucked away in a place to each of us a "sacred shrine." Perhaps there is on her table the portrait of a son, as there is on mine a daughter, both the expression of the finest thing in the human heart. If we could only build on that there would be neither hate nor lust. If we could only grasp the fact that the Jesus concept developed within the human conscience, long before Galilee in the Egyptian home. There is the spirit of Jizo, but it is the voice of my own Agnes. Her spirit has guided my pen as I wrote this book. We cannot know what it means; neither the simple grandma, nor the aging scientist: we can only feel.

CHAPTER XVIII

EPILOGUE

How we got where we are has been summarized in the preceding chapters. How we were being prepared for world tragedy throughout 2,000 years; how we followed a cruel and vengeful God; how through belief to salvation, salvation through faith, suppressing all the noble efforts of mankind. As I have shown there is now much lamentation on the part of the clergy, but the concern is about the church as an organization, not for the welfare of our children. Yet we must not blame the clergy because war came. Though they implied that prayer would prevent war, would bring peace, we can only blame ourselves if we believed them. All the evidence, gained by experience in various wars, indicated its utter impotency.

The representatives of our democracy have proved equally unworthy of faith in their dependability. There remains only the individuals working in the faith that work will tell. Organizations have failed us; we must depend on ourselves. That is clear to us now.

We think when we vote that we are exercising our duties as a part of democracy. We now see that in this act we really assigned our part in a democratic government to others that they might enjoy the individual salvation of continuance in office. Those for whom we voted sold us out to a life of bondage. How complete it will be we do not know, nor do they. Now like the clergy they are running about in circles trying to repair the damage.

A terrible war has come; how terrible it is we do not know. Only after the fighting ceases will we be able to add up: How many have been allowed to return as they went away; how many alive but changed in character and in outlook on life; how many have lost their lives, the true number; how

many have lost all but life, vegetating in a mental hospital, or are "missing." I draw the curtain here.

Even these figures will be available to us only in so far as those who had led us feel it is politically expedient for us to know. They will let us know the financial cost from year to year as they discover any assets that can be abstracted from us and from our children and our children's children, as one soldier writes from his foxhole.

Some things we will never know. Each casualty on the battlefield leaves sufferers at home, suffering without words, things only we doctors understand. I note a great difference between the mothers of World War I and today. Then they prayed to God to save their boy. Now there is a strange silence. God has left them cold. Who was it made it necessary for them to sacrifice their boys? Therein is the real unknown factor that those who did take them will need to reckon with. Will the mothers themselves take up the refrain "Vengeance will be mine?"

After all these factors have been calculated, as well as it is possible to do, we will face the results of the moral breakdown. A hundred years will be but the morning of the first day. We see today a resurgence of religion and sex as has always been the accompaniment of war. This is a manifestation of lust and not a seeking after God. The phallic worship, of which this is a manifestation is the scene that has fixed our attention all these years. Many of the tragedies befalling our fine young girls must be added to the cost of war.

In this dark hour we must look beyond these organizations who have charted our destiny. Our only hope lies in the fact that throughout the ages there has been a something in the human heart struggling for something noble to gain the light of day. It is

the mother instinct, and the child. This is the democracy which has been taken from us. We have traded it for personal salvation, and the more abundant life. We have traded our boys for these promises. Our boys are taken from us to be reeducated for death. To restore to the mother her child is the liberty for which our boys are bleeding, bleeding from their arteries and their loyal hearts. They understand their parents have been gipped, and do not condemn them.

If I were asked what has compensated me most for the arduous life of the doctor I would say it has been the privilege of viewing the scene of young parents as I handed them their first baby. It is a magnificent drama without words; if there are words they are irrelevant and immaterial. Had I the power I would wipe all else from the history of mankind.

Where can an old doctor find a basis on which to rest his faith in mankind? Millions of civilization's finest, freely going forth for liberty from the cussedness that has threatened his loved ones. Liberty from organizations which decry the value of personal effort, suppress the results of personal achievement. That is grim reality.

But through it all there is this refrain which we hear from the field of carnage: Our boys want to get it over with and get back to mother, wife and babies, perhaps a baby he has never held. Or the boys want to get home and find their sweethearts and build themselves a home and have a baby to hold. They have gone through hell in the hope of achieving a fireside of their own. That is the liberty for which they are contending.

Here possibly at long last the Jesus concept, freed from all the cruelty of a phallic worship, may be born into the world. Then and not until then can we say that love has found a permanent abiding place in

the human heart, freed from lust and hate and blood.

That we stand on the threshold of a new day is made clear by talking with the furloughed soldier, and even more so by those still anchored in foxholes. Here is an excerpt of a letter written by a soldier in Sicily: "I hope that each of the soldiers who has been enlightened by his experiences over here remembers this, the greatest lesson of his life, and honestly and earnestly tries to create or help to create, a new and better post-war world. It can be done—but not by muddling self-loving, grasping politicians or by the procrastinations of an over aristocratic diplomatic corps, rich in the knowledge of languages and customs, of the right thing to say and do—but poor in the knowledge of the people. If the world is to be changed for the better the change must be brought about by the little man who is fighting now for its salvation."

The "little man" indeed, the little man is us, long dominated by those who have brought us to our present predicament. He has identified organized forces which have used the individual's conscience as a pawn in their game. Our boys are fighting for the salvation of the race, for civilization. Real democracy is the sum total of the efforts and achievements of the individual, not in delegating authority to others to use them as they will. Poor indeed is the vision of organizations if they fail to see that the aggrandizement of their own interests and the venal exploitation of individuals is nearing its end. The days of reckoning are come. The politicians appear to appreciate this fact since stimulated by the voice of their constituents they are exhibiting evidence of unsuspected latent statesmanship and are hastening to apply large padlocks to the barn which once housed the steed on which democracy once did ride.

History teaches that it is tragedy which builds character. We may confidently hope that the griefs of the present conflict, both at home and the battle-front, will bring a new light and a new courage to fight for the liberty of the individual to follow the dictates of his own conscience. In full faith that it is this liberty our boys will achieve is to be found *on the grounds of an old surgeon's faith.*

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